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DESIGN FOR A SMALL MUSEUM.

MANUAL FOR SMALL MUSEUMS

BY

LAURENCE VAIL COLEMAN

EXECUTIVE SECRETARY OF
THE AMERICAN ASSOCIATION OF MUSEUMS

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PREFACE

THIS book is intended for the use of those who set about to found museums or to build up small museums now existing. The writing of it has been prompted by observation of the rapid growth of interest in museum-making and the hindrance or defeat of many efforts through lack of information.

There are certain possible misapprehensions as to purpose which may be forestalled. First, no brief is held for joint treatment of history, art and science. Second, standardization is not contemplated. The real aims in these two respects are stated in the first chapter. Third, no visionary or untried schemes are advocated. Fourth, the various suggested plans, in simplest form, are not too ponderous for any small museum.

Much of the material has been gathered during the past two years in the course of travels over fifteen thousand miles from border to border of the country and from coast to coast. Hundreds of museums have been studied and their work interpreted on the basis of extensive reading and practical experience with five institutions.

For opportunity to create the book as a part of official duties, I am indebted to The American Association of Museums which has its headquarters at the Smithsonian Institution. The work has been financed under grants made to the Association by The Carnegie Corporation of New York.

To several persons I am happy to make acknowledgment of assistance. Paul Marshall Rea and Frederic Allen Whiting, both of Cleveland, have read the manuscript and made many valuable suggestions. Mr. Rea has been exceedingly generous in helping with the chap-

14075

ters on finance. To William E. Hannan, Legislative Librarian of the State of New York, and to Edward W. Stitt, Jr., of New York City, I am indebted for legal advice. Edgar A. Josselyn has made the frontispiece and other architectural sketches which are reproduced. Ralph Hayes, Frederic A. Lucas and Harry C. Beers, of New York City, and Rossiter Howard, of Cleveland, have also helped with counsel.

It was my first intention to give specific credit for many of the ideas which are developed in these chapters, but the task was found to involve too many delicate problems relating to priority. In general, however, I make grateful acknowledgment to the many friends who have entertained the journeying observer and given willingly of their thoughts.

L. V. C.

CONTENTS

INTRODUCTION

CHAPTER — PAGE

I.—Small Museums 3

II.—The Museum Field 6

III.—The Purpose of Museums . . . 10

FIRST PART

ORGANIZATION

IV.—Getting Started 15

V.—The Name 19

VI.—Organization 21

VII.—The Board of Trustees . . . 24

VIII.—The Director 27

IX.—The Staff 30

X.—The Membership 34

XI.—The Women's Auxiliary . . . 38

XII.—Cooperating Organizations . . 40

SECOND PART

ADMINISTRATION

XIII.—Personnel Relations 47

XIV.—Income 56

XV.—Expenditure 68

XVI.—Plant 75

XVII.—Endowment 79

CHAPTER PAGE

XVIII.—Accounts 88

XIX.—Office Methods 109

XX.—Program 112

XXI.—Temporary Quarters 115

THIRD PART

CURATORIAL WORK

XXII.—Accession Policies 121

XXIII.—The Study Collections . . . 127

XXIV.—The Exhibits 131

XXV.—Outdoor Exhibits 136

XXVI.—The Lending Collection . . . 140

XXVII.—History Collections and Exhibits . 147

XXVIII.—Art Collections and Exhibits . . 161

XXIX.—Science Collections and Exhibits . 166

XXX.—Collecting 171

XXXI.—Museum Records 173

XXXII.—Numbering and Tagging . . . 184

XXXIII.—Preparation 187

XXXIV.—Housing the Study Collections . . 195

XXXV.—Exhibition Cases 198

XXXVI.—Installation of Exhibits . . . 209

XXXVII.—Labeling 223

XXXVIII.—Museum Groups 232

FOURTH PART

EDUCATIONAL WORK

XXXIX.—The Museum at Work . . . 241

XL.—Activities for Children . . . 246

CHAPTER PAGE

XLI.—School-Service 255
XLII.—Adult Education 260
XLIII.—The Museum Library 264
XLIV.—Publications 269
XLV.—Publicity 276
XLVI.—Campaigns 281

FIFTH PART

RESEARCH

XLVII.—The Small Museum in Research . 291

SIXTH PART

BUILDING

XLVIII.—Preparing to Build 297
XLIX.—Small Museum Buildings . . . 301
L.—Adaptable Building Plans . . 311
LI.—Interior and Equipment . . . 317

CONCLUSION

LII.—The Outlook 323

APPENDICES

A.—Charter 329
B.—Constitution and By-Laws . . 332
C.—Contract with Local Government . 343
D.—State Laws Affecting Museum Support 350
E.—Dealers in Reproductions . . . 380
F.—Directories of Museums . . . 384
G.—General References . . . 385
Index 389

ILLUSTRATIONS

DESIGN FOR A SMALL MUSEUM . . *Frontispiece*

PLATE NUMBER — FACING PAGE

1.—SANTA BARBARA MUSEUM OF NATURAL HISTORY . 6

2.—MONTCLAIR ART MUSEUM. 16

3.—STATEN ISLAND PUBLIC MUSEUM . . . 22

4. LIBBY MUSEUM, WOLFEBORO, N. H. . . 30

5.—SOUTHWEST MUSEUM, LOS ANGELES . . . 40

6. FOLLOW-UP STAMPS AND THEIR USE . . . 110

7.—THE BROOKLYN CHILDREN'S MUSEUM, WHICH HAS ESTABLISHED ITSELF IN A RESIDENCE . 116

8.—BRITTON COTTAGE—A 17TH CENTURY HOME MAINTAINED BY THE STATEN ISLAND INSTITUTE OF ARTS AND SCIENCES . . . 136

9A.—A LENDING SET FOR CLASSROOM USE ILLUSTRATING THE HISTORY OF PAPER . . . 142
Courtesy of Erie Public Museum.

9B.—FILE OF PICTURES IN A LENDING COLLECTION 142
Courtesy of The Newark Museum.

10.—METAL PILING UNIT FOR STANDARD TRAYS . 192
Courtesy of The Van Dorn Iron Works Company.

11.—TRAYS AND RACK FOR ACCOMMODATION OF STUDY COLLECTION MATERIAL 196

12A.—WALL CASE OF SIZE PROPOSED AS STANDARD . 198

PLATE NUMBER — FACING PAGE

12B.—Wall Case with Metal Frame and Wood Solid Base 198
Courtesy of The Newark Museum.

13A.—Center Case of Size Proposed as Standard 200

13B.—Center Case with Wood Frame and Leg Base. 200
Courtesy of The American Museum of Natural History.

14A.—Table Case of Size Proposed as Standard . 202

14B.—Table Case with Metal Frame and Wood Leg Base 202
Courtesy of Library Bureau Division, Rand Kardex Corp'n.

15A.—Moldings and Joints for Wood Case Frame 204

15B.—Sectional Plan and Elevations of Table Case with Wood Frame 204

16.—Sectional Plan and Elevations of Wall Case. For Center Case the Vehisote Back is Replaced by a Sash as at Front . . 206

17.—Simple Mounting for Swinging Screens . 208

18.—An Exhibit Installed Primarily for Pleasing Effect 212
Courtesy of The Metropolitan Museum of Art.

19.—An Exhibit Installed Primarily to Convey Information 218
Courtesy of Museum of Natural History, Urbana, Ill.

20.—Small Group with Individual Floor Case . 232
Courtesy of American Red Cross Museum.

21A.—Small Group with Portable Case for Exhibition or Lending 234
Courtesy of The American Museum of Natural History.

21B.—Groups Installed in Series . . . 234
Courtesy of Natural History Museum, San Diego.

PLATE NUMBER — FACING PAGE

22A.—Primitive Trade—A Small Group by Dwight Franklin 236
Courtesy of The Cleveland Museum of Art.

22B.—The Cotton Field—Another Group with Miniature Figures 236
Courtesy of Milwaukee Public Museum.

23.—Colonial Kitchen—A Period Room . . 238
Courtesy of Oakland Public Museum.

24.—A Museum Game in Progress . . . 248
Courtesy of Buffalo Museum of Science.

25.—Modes of Enlarging a Building . . . 308

26.—First Floor Plans for Small Museum Buildings 310

27.—Basement Plans for Small Museum Buildings. 312

28.—Plan of Plate 26–A in Detail . . . 314

29.—Plan of Plate 27–A in Detail . . . 316

30.—Stages of Building Expansion . . . 318

31.—Design for the Finished Building . . 320

BIBLIOGRAPHIES

SUBJECT	PAGE
Outdoor Exhibits	139
The Lending Collection	146
History Collections and Exhibits	158, 160
Art Collections and Exhibits	165
Science Collections and Exhibits	170
Collecting	172
Preparation	193
Housing the Study Collections	197
Exhibition Cases	208
Installation of Exhibits	222
Labeling	231
Museum Groups	238
The Museum at Work	245
Activities for Children	254
School-Service	259
The Museum Library	267
Publications	274
Publicity	280
Campaigns	288

SUBJECT PAGE

THE SMALL MUSEUM IN RESEARCH 294

PREPARING TO BUILD 300

INTERIOR AND EQUIPMENT 320

DIRECTORIES OF MUSEUMS 384

GENERAL REFERENCES 385

MANUAL FOR SMALL MUSEUMS

INTRODUCTION

I

SMALL MUSEUMS

THERE are a thousand museums in the United States and nine of them in every ten are small. Of the small museums nearly half belong to colleges or universities; the others are the small museums to which this Manual is specifically addressed. They are devoted to history, art or science, or a combination of these subjects. Many of them are adjuncts of libraries or historical societies, but others are independently established. They are to be found, for the most part, in communities of fewer than fifty thousand inhabitants—there being some in every state, but the greatest number in the East and Middle West. Locally they are looked upon with pride and, despite the slenderness of their means, hopes are commonly entertained for their development.

Many of these museums are administered ineffectively; many are collections or exhibits, and no more; some are in so deplorable a state that they have little usefulness and tend to bring discredit upon museums generally. On the other hand, many of them are active institutions operated for the public good and supported by the people.

For the past few years, there has been evidence of new interest in museums and of corresponding new activity in the movement. Moribund museums are taking up the methods of the active ones, and are entering upon careers. Progressive institutions are developing at accelerated pace. New museums are coming into being in surprising numbers. The press and other mirrors of the public mind reflect added interest in museums and new support for them in every quarter.

Whether or not this awakening is to produce small mu-

seums of real individual worth and great aggregate importance must depend upon the extent to which the lessons of museum experience are applied. The fund of practical information upon which any museum may draw has been derived from the experience of museums, large and small—of museums devoted to each branch of the field. Certain principles are the same for all. Differences in scale of activity are accompanied naturally by gradations in elaborateness of method, and differences in subject matter are responsible necessarily for variety of method, but the same broad fundamentals underlie the work of all effective museums. This does not indicate standardization; it shows response to the laws of things as they are, and it provides firm foundation for expression of individuality. In the chapters that follow an attempt is made to state fundamentals, and to show how they may be worked out progressively from the simplest beginnings, and how applied in each branch of the museum-field.

Most museums are devoted to only one subject—either history, art or science, but there are many which embrace two or all three. Ideally the three subjects are represented by three separate museums in a locality, but this is a practicable plan only for a large city where there are resources to finance it. In a small place, three museums cannot be supported properly as a rule, and the only means of developing a full range of museum advantages appears to be treatment of the three subjects by one institution—a *general* museum.

Not all general museums have begun with the entire field which they now cover; usually one subject has been taken up at a time. In most instances, history has made the first appeal because pride of ancestry, esteem of place, interest in antiquities and love of days gone by contribute to an interest that is strong and universal.

In many places science has come next, because people love the out-of-doors and are curious about wild creatures. Until recently art interest has inclined to lag, because art is commonly regarded as a costly and highly sublimated concern. The sequence of stages has been different, however, in the development of many general museums —art or science having caught interest first.

It is the purpose of this Manual not to urge co-treatment of all three subjects by each small museum, but rather to cover the full gamut of museum problems in the most direct way, namely that of discussing the affairs of general museums. This course avoids the duplication that would result from an attempt to treat museums of each kind separately. The idea of a general museum, therefore, is an accessory to this account, but none the less it is felt that the number of small general museums will increase greatly as time goes on.

II

THE MUSEUM FIELD

It is no matter of accident that the museum field includes history, art and science. These subjects, being represented by objects in the world about us, are the ones that are susceptible of museum treatment. Things which man has made and used, and which therefore are the tangible evidences of his ways of living or his acts, are known collectively as *culture material* to the specialist, but they are the materials of history—employing that term in the broad sense which historians now adopt and which H. G. Wells has made so popular. Any of these objects that are beautiful are works of art. The natural objects which surround us, and which are differentiated from those of history and art by the fact that man has not engaged in their creation,[1] are the materials of science—that is, of natural science, or natural history.

Museums of history collect artifacts of prehistoric peoples, and implements, apparel and other materials representing historic cultures—ancient and modern, primitive and advanced. Some have only objects which illuminate the chronology of events regarded formerly as the pith of history, but others, delving into archæology and ethnology, encompass the whole story of mankind. This breadth of view leads to interpretation of our own history in terms of our manner of life as well as the acts of our soldiers and statesmen. History collections, therefore, may properly be made up of selections from every class of thing that is man-made.

Museums of art are interested in more than the major arts: architecture, sculpture, painting and drawing.

[1] For qualification of this statement, read on.

SANTA BARBARA MUSEUM OF NATURAL HISTORY.

Many collections include ceramics, textiles and work in wood, metal and other materials; and recent years have witnessed the admission of jewelry, glassware, china, silverware, furniture, wall paper and other products of industrial art to museums which once recognized only paintings and sculpture. Art is the expression of man's sense of beauty. Every article that has ever been made to be beautiful is a work of art, but art museums usually interest themselves only with those objects which have high æsthetic quality.

Museums of science are concerned with living things, and also with the earth—the stage upon which the drama of life is enacted. Astronomy may be represented by very limited material, but rocks and minerals, plants and animals make up the bulk of collections. Man, as one of the living creatures, naturally receives attention, but many science museums do not stop here. In addition to the anatomical materials of physical anthropology, they collect artifacts and undertake a broad treatment of anthropology which carries them into archæology and ethnology.

Each of the three main branches of the museum field is sharply differentiated from the others in point of view, but as indicated, collections made to illustrate them are apt to have many objects in common. The possibility of duplication is greatest in connection with prehistoric and primitive culture material. This material is intimately related to history; it is capable of scientific interpretation; much of it ranks as art. There is ground for some difference of opinion as to whether it is susceptible of fullest interpretation in relation to history or to science. In this Manual it is regarded as material of history because this treatment is in harmony with an increasing tendency on the part of historical commissions, museums of history and other agencies to view history in

its broadest aspect as including archæology and ethnology.

In a small general museum which undertakes to embrace the three fields, more or less arbitrary division of subject matter is necessary, and the scheme presented here, though only one of the possibilities, is sound and workable. However, if history, art and science are the respective fields of separate museums, a certain amount of culture material may properly be included in all of them and treated by each in its own way.

In addition to the three main museum subjects, there are numberless special ones which are branches of history, art or science. Hence there are museums devoted to the history of an individual, of a city, of a nation, of a war, of a period or of some trait that has run the whole course of history—lighting or transportation, for example. There are museums devoted to the art of one man, of a nation, of a period or of some one kind of art expression from its beginning. There are museums devoted to the science of the earth, of plants, of animals or of some one group of plants or animals.

There are also museum subjects which are combinations of related branches of history, art and science. Industry, the most important of such composite subjects, includes some of history in connection with industrial growth, some of art in relation to æsthetic quality of certain products and some of science in that technical processes are concerned. Industry is so important—and has received so much attention from museums, especially abroad—that it may be regarded as almost a fourth subject, despite the fact that upon analysis it is resolved into the basic three. However, a small museum which deals with other subjects can hardly treat industry so intensively.

Sometimes it is asked how any museum which covers more than a limited specialty can possibly be small.

This question springs from the idea that all is grist to a museum's mill—a misconception that succeeding chapters should dispel. Wide range of subject-matter does not necessarily imply abundance of material. The truth is that only a liberally supported museum can attain to size without becoming mired in its own possessions.

III

THE PURPOSE OF MUSEUMS

MAN today gets food and clothing, pleasures and ideas at second hand. He is not forced to call upon the full powers with which nature has endowed him for self preservation, for enjoyment or for independent thought, and therefore he is making functional curtailments. Among the activities that are being dropped, is observation. Man tends to take from books his notions of the world about him.

Museums help to counteract this drift; they collect objects to be seen, and invoke observation of them. Since they are concerned with *things* the function commonly ascribed to museums is that of the ware-house, and to be sure, every museum does necessarily expend a large part of its energy in collecting objects and preserving them. But after all, collections are only means to certain ends. The ultimate purpose of museums is to raise the general level of refinement by giving pleasure and imparting knowledge. Since each institution addresses itself to the entire population in its community, it does not ordinarily have great effect upon the individual, but its aggregate influence upon the mass may be large. The keynote of the work is public service. The so-called *public museum*, which derives support from the people and recognizes its duty of service to the people is of the dominant and most promising type at the present time.

Museum material is largely of such character as to reward careful study; this moves students to make use of it for research, and induces many of them to engage permanently in museum work. Research is a major con-

cern of large museums whose collections are extensive and important, but most small museums find limited opportunity in this line of effort. In general, however, a natural balance between scholarship and educational activity is prerequisite to continued growth and vitality of a museum.

The educational work of museums is carried on by a variety of methods which years of experimentation on the part of many institutions have brought clearly into view. The technique is based on the use of objects to convey impressions through the eye, and it applies the principles of visual instruction.

The function of imparting knowledge goes hand in hand with another—that of giving pleasure. Museums of art are sometimes thought to be only secondarily concerned with education, and museums of history and of science are often regarded as solely intellectual in their appeal, but in truth the emotions quite as well as the intellect may be reached by all museums. There would seem to be a sound view in the statement that museums exist "to give opportunity for enjoyment . . . to those who seek enjoyment, and to give opportunity for study . . . to those who seek knowledge."

There is also an important recreational element in all museum effort. Doing what one *must* is work; doing what one *wants* is play. By virtue of the fact that relations with museums are voluntary ones, they are recreational, and therein lies their greatest power. Visitors to exhibition halls, children who come to museum story-hours, boys and girls who take field trips and who join study-clubs, adults who attend lectures or who register for instruction—all are moved by their own desires. Museums therefore find their devotees in most receptive mood and this fact may be responsible in no small part for whatever truth there is in the assertion that "hour

for hour, museums are able to give more than any one of the great universities."

Through the work of a museum people may be led to intelligent understanding of our past and of other peoples and their past, and upon this knowledge they may build keener interest in the future. They may come to think of history, not as dull, but as scintillating with the inspiration of biography and the fascination of romance.

Through the work of a museum people may be led to appreciation and enjoyment of the beautiful. They may learn to choose tasteful things with which to surround themselves, to enjoy true elegance and to express it in their daily lives by refined adornment of their persons, their homes and their communities.

Through the work of a museum people may be led to understanding of the world of nature. They may find satisfaction in knowing more about the earth and the living things upon it. They may learn greater love for the out-of-doors and so become more staunch protectors of the country's natural resources, and they may acquire happier and more sympathetic outlook upon science in its reverent search for truth.

Toward these ends museums move. Some are widely influential, but each one, however small, may do its part in its own sphere. In fact, small museums have special opportunities because in small communities, where most of them are found, so few facilities are offered for escape from the monotony and meaninglessness of plain existence.

FIRST PART

ORGANIZATION

IV

GETTING STARTED

No two museums are established in exactly the same way, but almost every museum owes its origin to the initiative of some one person whose enthusiasm spreads until a sufficient number of people become interested. The degree of success which attends each undertaking is determined in part by the energy and ability of its promoters and in part by their knowledge of the experience of others who have labored successfully with museums, large and small. Copying mistakes is a common but unfruitful practice; profiting by the experience of others though a more exacting task, is worth the effort.

At the outset, it seems to be essential that the leader in each museum enterprise have a clear notion of the place which he individually is best fitted to fill in the organization. This requires that he define his own motives and have knowledge of the various parts which may be played. At least he should decide whether he is to be associated with the movement as a volunteer, or to find in the prospective institution, work for which he will be paid. As subsequent chapters show, the opportunities for volunteer activity are many—ranging from the presidency through various other official connections to unofficial service or support. The chief salaried position is that of the director, and in a small museum it may remain the only salaried position for an indefinite period. No one but a specially trained person should hold this post. Apparently there is a common belief that anyone can run a museum, but a little observation will reveal the error of it.

It is almost a prerequisite to success that every new

museum movement make its first public appearance under the leadership of someone who will be recognized as free from pecuniary interest in the plan, for if anyone seems to be trying to make himself a job, the project usually has a cool reception. This does not imply that a person with the qualifications to direct the work professionally and the enthusiasm to promote it must remain inactive. It does mean, however, that such a person may best work quietly until the necessary volunteer support is found. Perhaps the strongest leadership of all, during early stages, is that of one who has a collection to present or financial support to give, but who makes it plain that no memorial is sought and no desire entertained to exercise control.

At an early stage, it is desirable that the interested group consult someone of experience in museum work in order to get a critical judgment of the local situation and to inquire into opportunities of finding a good director at the outset. Success depends largely upon trained direction during the formative period. In other chapters emphasis is laid upon the possibility of cooperation between several museums in sharing the services of a director. This arrangement promises to be adopted increasingly in future, and it is believed to have advantages that much more than compensate for any difficulties which attach to it.

Before an organization meeting is called, informal conferences are usually held. It is important that persons who are asked to join in such discussions be chosen with great care. Not a few institutions have been foreordained to failure by having drifted into the control of a wrong group. In fact, it is desirable that the promoters of any museum project inform themselves at an early juncture upon many of the subjects covered in this Manual, in order that pitfalls commonly encountered may be avoided.

MONTCLAIR ART MUSEUM.

When the actual work of founding begins, incorporation papers should be prepared and a constitution and by-laws drafted. Reference to Appendices A and B should facilitate these undertakings.

In determining upon the form of organization, questions may arise as to relations between a museum and some other institution—perhaps a library or a historical society. Experience has shown clearly that a museum does not thrive as a subordinate activity under such auspices, but the fact remains that many museums start in this way where otherwise they might not be established. If independent museum management is not practicable, the best plan seems to be that of placing control in the hands of a strong committee of library or other trustees with the idea that ultimately a separate board may be evolved.

A major problem of promotion is that of finance. This solved, the services of a director may be secured and intricacies of program placed in professional hands. A museum cannot be operated without funds. To build up initial support it is usually necessary for a few persons to give generously of money as well as time and thought. After the first few years, however, the burden may be distributed more widely by the development of a membership and of public support.

If it is found to be impossible at the start to raise funds for the salary of a director, an unpaid honorary director may be appointed, but it should be realized that under these conditions prospects almost invariably decline, and that after a museum becomes fixed in the public mind as an ineffective institution, nothing short of a spectacular reorganization can redeem it. The best course, therefore, is to overcome financial obstacles at the first opportunity.

The problem of getting an inactive museum launched

on a useful career is a difficult but not a hopeless one. Ordinarily three things are necessary: first, a president who can assume real leadership and tactfully replace "dead wood" with useful supporters; second, a director who can give sound professional counsel and develop a project worth supporting; and third, a well advertised closing of the museum followed by a reopening with visual evidence in the exhibits that new policies are in force.

An ever present menace to the success of any new endeavor is the person who insists that "in *this* town conditions are peculiar," and that, in consequence, it is not possible to follow the experience of others in similar undertakings. There is at least one respect in which all communities are alike: they are all peculiar. It is essential that every museum have a leader who can apply sound principles under local conditions and achieve success despite peculiarities.

V

THE NAME

THE name of a museum may advantageously include that of the locality, in order that it may serve in effect as an address, and also that it may appeal to local pride which tends to focus upon an institution bearing a local place-name. A common alternative is to honor a founder or patron, but this is generally regarded as a mistake. An institution named after an individual is bound to be associated in the public mind with that person or his heirs and to be regarded as somewhat of a private enterprise. Experience has shown the difficulty of developing support for a museum so designated, and it is significant that there are instances of refusal on the part of broad minded benefactors to allow use of their names for just this reason. However, a building or a portion of a building occupied by a museum may be known as a memorial to its donor without invoking difficulties which arise from so naming the institution in its corporate title.

Museums render public service and many of them enjoy public support; therefore they are public institutions, even though as a rule they are privately controlled. To indicate this fact the designation *Public Museum* is commonly used in the name, and there are indications that the example will be followed increasingly. Library experience over a long period has shown the advantage of this practice, and it would seem, therefore, that the Erie Public Museum, the Milwaukee Public Museum, the Oakland Public Museum, the Oshkosh Public Museum, and the Reading Public Museum—to mention only a few—are aptly named.

If it is desired to indicate the field of a museum, words

such as *of History* or *of Art and Science* may be appended. The term *Natural History* is employed instead of *Science* in many cases.

Smithtown Public Museum of Art is apparently too long a name, however, since the form *Smithtown Museum of Art* is more common. If a museum is a general one, or may be such ultimately, it seems needless to specify: *of History, Art and Science.* One museum which is named in this way has adopted a shorter designation unofficially.

It may be desired to incorporate *The* into the official name: *The Smithtown Public Museum* or *The Smithtown Museum of History.* There are many precedents for this, but it seems rather cumbersome.

VI

ORGANIZATION

THE various common forms of museum organization are survivals from successive periods of museum history in America. During a century and a half changing conditions have offered in succession several different sources of museum support and each has produced its own type of institution. The first museums were those of learned societies, brought into being to contribute to the knowledge of a new land. Another generation witnessed the establishment of museums in colleges where they served as laboratories of natural theology—precursor of the natural sciences. Still later when historical societies sprang up, historical collections were developed. With the increase of prosperity privately supported museums appeared—each "to do homage to the memory of a rich man's hobby." Museums of all these varieties are in existence at the present time, but only a few of them, by responding to new influences, have shaped themselves to meet conditions of the present day.[1]

The modern type of museum, which has been termed the *public museum*, is a product of the past few decades and it is this type which gives greatest promise. Some of these public museums are controlled and financed wholly by government, either federal, state or local, but a majority of them are independent corporations which derive support in part from public funds and in part from contributions of individuals. This last plan is

[1] The evolution of museum organization and support is reflected in the history of our oldest museum, as shown interestingly by Paul M. Rea: A contribution to early museum history in America. Proc. Amer. Ass'n. Museums, 1915, 9: 53–65.

considered to be the ideal one. Under it the museum corporation usually enters into contract with the city for tenure of public land, which may be in a park, and of a building, which may be specially erected with proceeds from the sale of city bonds. For maintenance of the property the museum receives an annual share of tax funds. With money secured from private sources the public museum develops its own working organization, makes collections and prepares exhibits. These enterprises are collectively the basis for popular educational activity which is a public service, and for this purpose, therefore, the museum may receive further support from tax funds of the city, and also a share of county support if the work justifies it. Under this plan of finance has come about the recent growth of museums in number and importance.

It is essential that a public museum be incorporated in order that it may enter into contracts with governmental authorities, receive public funds and bequests, secure exemption from taxation and enjoy other rights under the law, as well as to extend proper personal protection to its officers. Museums are incorporated without capital stock and not for profit.

The body corporate in which property is vested may be a group of a dozen or more *trustees* who elect their own successors, or it may be a large group of *members* who elect trustees as their representatives to manage the museum. Both forms of organization are common and both are effective, but for a museum in a small city probably the latter, or democratic form, is the better, since it affords opportunity for many people to become closely associated with the museum by sharing responsibility for its management. In addition to the elective trustees, a museum which enjoys public support should have *ex-officio* trustees who are public officials.

STATEN ISLAND PUBLIC MUSEUM.

As explained later the board of trustees functions largely through its officers and its standing committees and is assisted in many instances by a women's auxiliary. The administrative or executive work of the museum is carried on by a *director*, who is a paid agent of the trustees. Under the director is the staff made up of *curators* and their assistants. In a very small museum the staff may be a group of volunteers.

Details as to form of the organization and its workings are given in succeeding chapters—especially the next five and the chapter on personnel relations—and also in appendices on the charter, constitution and by-laws.

VII

THE BOARD OF TRUSTEES

THE board of trustees of a museum is a body of public spirited citizens clothed with authority to manage the affairs of the institution. The trustees receive no compensation but are rewarded in the satisfaction that is born of useful service and in whatever honor may attach to their positions. The ideal trustee is a good business man or woman, interested in education, with few prejudices, affiliated with no narrow group, and capable of taking continued interest in a museum without trying to hamper the director by too close interference in detail.[1] Although women are capable as trustees they usually find work of the women's auxiliary to be more congenial.

Elective trustees may number as many as a score, but ordinarily a board of not more than a dozen is most effective. Trustees are elected by the corporation—that is, by the entire membership if the democratic form of organization is adopted—and they usually serve for three, four or five years. The terms are arranged so that an equal number expires each year. This prevents a complete overturn of administration at any time, and assures continuity of policy. In some instances immediate reelection to the board is not permitted under the constitution, but this is a serious disadvantage.

Ex-officio trustees should be in minority to avoid any danger of political interference. Three is the usual limit of their number. Local conditions determine the choice of public officials to serve in this capacity; in most com-

[1] This sentence paraphrases the statement of qualifications for the ideal library trustee in: Bostwick, Arthur E. Administration of a public library, Chicago, American Library Association, 1920, p. 3.

munities the superintendent of schools, the mayor, the commissioner of parks and some officer who is influential in municipal finances are among the eligibles. *Ex-officio* trustees should be induced, if possible, to take an active interest in the museum.

The officers of the board—president, vice-president, secretary and treasurer—are usually elected by the trustees from among their own number. This practice is regarded as safer than to entrust the power to the membership at large. As a rule, each officer serves for one year and may be re-elected any number of times in succession.

The president should be a person of high standing in the community, though not necessarily the "first citizen." It is imperative that he be a man of affairs and, further, a man of action. If he has independent means, he is in an ideal position to induce others to assist in the support of the museum. A man who is effective in this office should be held as long as possible. The vice-president should be of presidential calibre, since he is very likely to succeed to the presidency. The secretary should be a person of business-like proclivities; a lawyer may serve in this capacity to special advantage. Ordinarily he is relieved of most of the duties of office by the director or those working under him, but in a small organization the secretary may assume the burdens which are always nominally his. The treasurer should be familiar with finances and management of property. The offices of secretary and treasurer are sometimes combined.

Much work of the board of trustees is delegated to committees. Of these the most essential is the executive committee which should include the officers. There is usually an accession committee also. Meetings of the executive committee are usually held at short intervals, whereas the trustees meet perhaps quarterly, and the

corporation—if it include the members of the museum—only annually.

The machinery of the board, as defined by the constitution and by-laws, is more fully described in Appendix B, and the functions and duties of trustees, officers and committees are treated in the chapter on personnel relations—page 49.

Although the board of trustees usually delegates a large part of its authority to officers and committees, every trustee has definite responsibilities which are not discharged by acceptance of his position or attendance at meetings. There are certain obligations neglected quite commonly with unfortunate results. These are first, to assist in raising funds, second, to help intelligently in establishing policies for their expenditure, and third, to keep in touch with the work in order to judge results. All three of these functions require giving of time, thought and effort.

VIII

THE DIRECTOR

THE director is the chief administrative officer of a museum. To the trustees he is professional adviser and agent in carrying on the work of the institution. He is assisted by his staff, which in a very small museum may be a group of volunteers. In fact, there are museums in which the director is the only regular employee, and in that case he functions on a small scale as the equivalent of the entire staff of a larger museum. Ideally, the director is concerned with administrative matters only, leaving the care of collections in the hands of specialists—either employees or volunteers—who form the staff of curators. Under these conditions it is not difficult to combine the treatment of history, art and science, since the director is no more required to be historian, art connoisseur and scientist than is a hospital manager obliged to be both nurse and surgeon. With very limited assistance, however, greater responsibility falls upon the director, and the museum's field of usefulness tends to be little wider than the director's range of knowledge.

In any event, a museum director should be a person of wide interest, sound understanding of the field covered by the institution and real devotion to public service. Breadth of mind is more important than wealth of knowledge—although, of course, both are desirable. Erudition in one field must not be accompanied by lack of sympathy for others with which the museum deals. A specialist is more likely to make a good director for a special museum than for a general one, but the individual with esoteric interests only, is not qualified to manage the affairs of any museum.

Knowledge of art markets and values, which is indispensable to the director of a large art museum, is not as important to the director of a small one, since ordinarily acquisition of costly works is outside the range of his opportunity.

Selection of the director is regarded as the most important single problem which comes before a museum board. Salary for a qualified director is the most productive commitment that the trustees can make. The life of a museum is wrapped up in the personality and ability of its director. A museum in charge of a custodian or caretaker is doomed to be a mausoleum.

Part of the time of a capable director is preferable to the full time of one less able. If several museums should share the cost and the time of a well-trained director, a splendid solution of the problem would be found. This possibility is discussed in the chapter on expenditure—page 73.

The title *curator* is applied to some directors, but this is not in keeping with best practice. Even though he may have no one to direct, the person in charge of a small museum is really the functional equivalent of the one who, in a larger institution, holds the title of *director* by virtue of his right to supervise the activities of others. Furthermore, the unassisted director of a small museum may be expected ultimately to develop a staff to relieve him of minor duties at least. The assistant who takes up the clerical work becomes the bursar and perhaps also the registrar—in fact if not in name. Those who assume charge of collections become curators. The director then becomes all that his title implies. However, if a person of curatorial type is first appointed, there may be a practical reason for use of the title *curator*, as evidence of an understanding that later a director may be placed in charge.

There are both men and women in the ranks of directors. The larger museums command the services of men in most instances, but many small museums are directed by women. In all probability the future will offer greater opportunity to women in this work. Whether or not a local person is to be desired cannot be answered for all cases, but other things being equal, a stranger usually has fewer difficulties because of ability to disregard petty traditions and undercurrents of personal triviality and jealousy which might tie the hands of a native. However, personal qualifications are of greatest importance.

IX

THE STAFF

The staff is the group of workers headed by the director. In a large museum there may be on the staff a number of curators—each in charge of a department representing a branch of the field. There may be associate curators, assistant curators and assistants in each department. There may be a librarian, a bursar, a registrar and a superintendent of buildings—each with helpers. However, in a small museum, the staff may consist of only the director, perhaps with volunteer associates and a part-time assistant or two.

Experience shows that in many communities volunteer service, especially of the curatorial type, can be secured. In fact, the ability of the director of a small museum to enlist and administer such help is one measure of his success. Seldom is a volunteer able to give unremitting effort, but with special knowledge, he may render valuable service in such hours as he can spare.

CURATORS

A curator is a department head. Each curator has charge of collections in his field and, in a strong organization, besides developing and caring for the study collection, he plans exhibits—in conference with the director and sometimes with other curators—and supervises or carries out the preparation of exhibits along lines that are approved. He also collaborates with the director in rendering educational service and performing other museum functions. In a very small museum it may be necessary that many of these duties devolve upon the director, the

LIBBY MUSEUM, WOLFEBORO, N. H

volunteer curators concerning themselves primarily with the study collections.

Appointments should be made with reference to natural divisions of the field. A museum devoted to history, art and science might establish only the three departments, securing the services—whether paid or volunteer—of a curator for each. In many cases the director himself fills at least one curatorship.

The departmentization of a small museum may seem to be unnecessary, but if only as a way of assisting to organize the collections and records, it is a convenient practice to divide in this way. In fact, conditions may make it desirable to divide certain of the main subjects, especially if a museum is concerned with only one of them. Perusal of the reports of the larger museums will indicate the possibilities. A very common practice is to set off a single major branch of a subject under one curator, grouping remaining branches under another. For example geology may be separated from the other sciences, archæology and ethnology from history, painting from the other arts. Local conditions—especially the number and qualifications of people available for curatorial work—should determine arrangements. So long as leadership in any department is lacking, the corresponding branch of work is not ready for development.

Teachers, college professors and librarians are usually most ready to help. Some collectors are of the museum type; others are absorbed in narrow specialties and are not receptive to new points of view. Volunteer, or *honorary*, curators should be appointed for one year at a time rather than for an indefinite period. This may help to solve problems that otherwise might be perplexing. Sometimes it is possible to enlist not only the interest of an individual but also the cooperation of an organization by making an appropriate appointment. For example

an officer of the local chapter of the D. A. R. may be qualified to serve as curator of history, or a leader in an art association may be a proper candidate for curator of art.

At best, however, a staff of volunteers is unsatisfactory; only with difficulty can a constructive program be pursued except through the efforts of paid workers. As the museum movement progresses, new means will surely be developed to aid small museums in employing personnel —perhaps through general adoption of a plan for cooperative staffs.

The problem of securing instructors to carry on school service has been solved by a number of museums in a way that may be looked upon as standard practice. The school superintendent assigns one or more teachers to work at the museum under the direction of the proper museum authority but on pay of the school board. In a small community this plan might be instituted with only part-time of an instructor.

ASSISTANTS

Office routine, clerical, shop and janitorial work demand the services of paid assistants—even if only on part-time. Usually much of this is done by a handy-man.

The work which school boys and girls have performed for several museums leads to the thought that others might employ young people at odd hours. Mechanically or artistically inclined boys and young men may do excellent work in preparation of exhibits. Patient and careful girls can adapt themselves easily to much of the routine work connected with records, labeling and arrangement of collections. Quite a small fund may be made to go a long way by engaging such help.

There are also ways of securing some labor gratuitously.

School classes in manual training make frames, trays, boxes, stools and even cases for several museums. In other places, city employees take care of the museum grounds, and policemen are assigned to guard duty in exhibition halls. The desirability of a police officer in this capacity depends largely upon individuality. A forbidding guard is harmful.

X

THE MEMBERSHIP

EVERYONE interested in a museum should have opportunity to be identified with it and to share in its support by becoming a member. In many small cities from one to five per cent of the inhabitants are so enrolled. In addition to revenues which are derived from dues, a museum receives immeasurable advantage from the influence of its own clientele, and the members in turn have opportunity to derive special benefit from the work of the museum. A strong membership is therefore an important asset.

As already noted, the members may be connected only nominally with the institution, or they may be actual members of the corporation. The latter plan seems to be the more advantageous one for a small museum.

CLASSES OF MEMBERSHIP

It is customary to provide for various measures of generosity towards a museum by establishing several so-called *classes* of membership—each with different dues. Further, in each class there are memberships of two kinds: the one involving annual dues and being renewable from year to year, the other depending upon a single relatively large contribution and continuing either for life or in perpetuity. The latter is a sort of paid-up membership—the required single contribution being of such amount that, if invested at 5%, it yields each year the equivalent of annual dues of the same class. These memberships for life or in perpetuity serve the purpose of cementing relations with members who might drop out sooner or later on the

early plan, and also they may offer some inducement to the making of large contributions.

These principles are embodied in the following scale of memberships, which may be adopted as it stands or multiplied by a factor of 2, 3, 5 or even 10 in order to adjust it to the temper of a community or the needs of any particular museum.

Active Members	$1 a year
Contributing Members	5 " "
Sustaining Members	10 " "
Active Members for Life	$20 in one payment
Donors[1]	100 " " "
Patrons[1]	200 " " "

A high scale of dues cannot be put into effect in every small community, but in most places there are at least a few people who can and will give $25 or more a year. Therefore, if the above scale is adopted, provision might be made for another class—Fellowship Members—paying $25 a year, although, of course, this would necessitate dropping the class of Active Members for Life. There might also be a class of Benefactors with dues of $500 in one payment. However, since it is a mistake to start the scale of dues too low, the figures of the table multiplied by 5 seem to be about right for most small museums.

Some museums add to endowment all dues of members for life or in perpetuity, but this practice is difficult to follow consistently, as, for example, in the case of a person who contributes to current funds an amount sufficient to entitle him to election as a patron. Gifts of books, objects for the collections or other property may be considered as acceptable in lieu of cash contributions for election to membership in the higher classes. If this be so, the by-

[1] Donors and Patrons may be elected either for life or in perpetuity.

laws should specifically give the trustees discretion in each separate case.

Children are admitted to some museums as Junior Members upon payment of dues of a few cents, but a more effective plan is to organize them separately, as explained in the chapter on activities for children.

Honorary membership is a status which carries no financial obligations, and which may be conferred by the trustees in recognition of exceptional services to the museum or the cause which it represents. Election is for life.

PRIVILEGES OF MEMBERS

Many people become museum members out of willingness to assist an institution which renders public service; others join in expectation of returns. For the latter, and therefore for all, it is necessary to offer certain definite privileges of membership such as admission to special lectures, receiving publications and other advantages.

Usually a membership card is provided. Many museums by mutual agreement recognize each other's cards, so that their members enjoy privileges out of town.

GETTING MEMBERS

The telephone is the most effective means of enlisting new members. Some museums employ one or more women to make continuous efforts; others rely upon occasional help from volunteers who are willing to work on a list, a territory or a social group.

It is imperative to solicit for the higher classes first, in order that good prospects for the higher classes may not escape by enrolling in lower classes with attractively small dues. This is accomplished easily in the case of a newly organized museum or of one which is developing its membership for the first time, but an institution with an estab-

shed membership may place itself in the same position f advantage by closing admission to all classes except the ppermost. Then, as its efforts progress, it may open he successively lower classes one at a time, over a period f several years.

It will be found advantageous from the standpoint of ookkeeping to date all memberships from the beginning f a fiscal year. Members who join late in a year may ave their memberships dated ahead and enjoy member- hip privileges gratis for a few months. This is an econom- cal practice in the long run.

The average member continues in good standing for our or five years and then drops out. At the end of he third year, therefore, it is good practice to make an effort to interest each annual member in a membership or life or in perpetuity. By persistence in seeking new riends, and attention to keeping those already enlisted, a museum should be able to secure substantial income rom its membership.

XI

THE WOMEN'S AUXILIARY

In order to provide congenial channels of effort for women who may be interested in a museum, it is advantageous to form a women's auxiliary, which by precedent is an independent society with its own members, officers and rules. It is essentially a cooperating organization, although in the nature of things its relations to the museum become more direct and intimate than those of other such organizations. In some instances a permanent provision is made to secure representation of the auxiliary on the board of trustees, but whether this arrangement is formal or not, such representation is usually given.

In order to assure harmonious cooperation, administrative status should be defined clearly. Invariably, an auxiliary is an advisory body which may make recommendations to the trustees, but which exercises no actual control of museum affairs. Its influence may be strong, especially if its recommendations are supported by offers of financial assistance, but even work which it supports should not be controlled directly by the auxiliary. All authority should be in the hands of the director, acting under instructions from the trustees. Even if members of the auxiliary participate as volunteers on the staff of the museum, they should do so out of a desire to assist and not to exercise authority. Otherwise extremely difficult situations are created and the work of the museum suffers.

An auxiliary may be able to do useful work in many directions, but experience has shown that attention is given most advantageously to support of activities for children. This branch makes strong appeal to women, and the arrangement is manifestly so appropriate that

public sympathy and support are not too difficult to secure. Money raising efforts of the group frequently take the form of social functions—enterprises in which the museum itself could not indulge with full propriety. Through its auxiliary a museum may hold the active interest of an ever increasing number of homes, and in consequence should see its influence and usefulness develop.

XII

COOPERATING ORGANIZATIONS

In nearly every community there are established organizations devoted to subjects with which museums deal. In the field of history there may be a historical or pioneers' or old settlers' society, a chapter of Colonial Dames or D. A. R., a post of the G. A. R. or a branch of any of the score of national or regional patriotic bodies. Art may have devoteees in any art association or a women's club. Interest in science may be represented by an Audubon society, Agassiz club or horticultural society.

A museum should make every effort to give encouragement and help to such groups, and in dealing with them it should avoid competing or seeking to absorb them or to gain control of their affairs. There is need of cooperation everywhere, but much so-called cooperation among organizations of every size and rank is virtually masked warfare—selfishness and competition parading as generosity. Real cooperation can begin only when each party is convinced of the good will of the other and when each wants to show its own intentions by its helpfulness.

A very material aid that can be given to some organizations is to provide a meeting place for them. Every museum should have a room for meetings, and in a small museum where the auditorium is used for this purpose, the space is usually not elaborately appointed—flexibility being afforded by simple and movable equipment. Such a room may be arranged to suit almost any kind of gathering, and may be put to excellent cooperative use. Ordinarily museums make no charge except for actual cost of light and service, but the privilege is given discriminately.

SOUTHWEST MUSEUM, LOS ANGELES.

Scouts, woodcrafters, campfire girls and other groups of young people may avail themselves of this advantage. Activities for children who are reached in this way are discussed in another chapter—page 246.

Societies which do not purpose to own property often become the recipients of collections containing materials of museum quality or character, and they may desire to deposit such collections in a museum. This is another basis of cooperation. A museum favored in this way should be careful to maintain its policies in the matter of what it will accept. Accession policies and terms of loan are dealt with elsewhere—page 121.

There are instances of very great helpfulness on the part of cooperating organizations. For example, in one city a society sponsors a department of the museum and pays the salary of a regular member of the museum staff to work along lines that are mutually agreed upon.

HISTORICAL SOCIETIES

Many historical societies exemplify strikingly the embarrassment of an organization by what it owns. Although interested primarily in American history, and acting almost invariably as historical libraries, these societies become burdened with unwieldy collections of all sorts and from every corner of the earth. When room is needed to continue proper work, the appeal for it is usually translated into a call for space in which to house partly irrelevant and entirely ill-kept collections. A fireproof building is erected and jammed full, and little by little the organization is choked to death.

If such an accumulation of objects were deposited in a museum on indefinite loan or by gift, two creditable pieces of work might be done—one by a historical society and one by a museum. It is doubtful that the future will see

any marked and general rejuvenation of historical society museums, but with the growth of public museums in small communities where so many of the societies are located, it may be that some of the collections will be transformed into worthy museum exhibits.

PUBLIC LIBRARIES

Libraries and museums are natural cooperators because they have purposes that are similar and methods that need not overlap. However, since many libraries have exhibit spaces and most museums have special book collections, there are practical reasons for arriving at understandings. Relations which have to do with books are treated in the chapter on the museum library—page 264.

In the use of the library's exhibit space, there is a practice which has become established in many cities, large and small. Museums have learned that branch exhibits installed in public buildings, and changed from time to time, are effective in reaching much larger audiences than museum attendance can provide. Libraries have discovered that exhibits stimulate the reading of books related to them. Therefore, arrangements are often made for a museum to install small temporary loan exhibits in a library—the cases being provided by the borrower.

In any community, the museum and the library may profitably be located upon adjacent sites, but it has been found undesirable as a rule to consolidate them under one managing board, or to have the two institutions in charge of one person. Methods and viewpoints are so different that a museum director is rarely a good librarian and vice-versa.

EDUCATIONAL COUNCILS

In a number of communities, the persons immediately responsible for the work of various educational agencies

have constituted themselves an informal group for discussion of matters in which they have common interest—especially questions of cooperation or mutual agreement as to province. These groups are termed *educational councils*, and the plan which they represent is recommended highly. There are hundreds of places where the director of a museum, the secretary of a historical society and the librarian might get together occasionally. To such a nucleus other leaders may be drawn to the end of giving the community the best advantages with a minimum of loss through duplication of effort and friction.

SECOND PART

ADMINISTRATION

XIII

PERSONNEL RELATIONS

THE effectiveness of museum administration depends, in the last analysis, upon the characteristics of individuals who make up the organization. It would be futile to dwell upon personal traits if it were hoped to change them, but it is vital to consider them as a basis for selection and elimination of individuals. Within the board this responsibility falls chiefly upon the president even though he has not power to act arbitrarily. For members of the staff, the director is responsible.

Certain qualifications for places on the board and staff have already been considered, but others of equal importance are those which are evidenced by conduct that is termed *business-like* and *ethical*.

BUSINESS-LIKE CONDUCT

Sometimes it is maintained or assumed that business standards are quite unrelated to professional work, but there are objections to this attitude which have been stated especially well in respect to libraries.

> "The public library is, or should be, a business institution. Those who do not like to admit this do not realize that business, conducted in a 'business-like' way, is the most honorable of occupations and the most useful to the community. To say that librarianship is a business is to pay it a compliment. To assert that a librarian's administration is not 'business-like' is to make one of the most serious charges that could be brought against it. The public library does not oper-

ate for a money profit, but it must show that it has rendered services to the community that are well worth the money that the community has put into it. The very fact that its success cannot be measured financially, like that of a commercial concern, is all the more reason for making sure that its work is carried on in the same manner that would bring success in commerce."[1]

Business-like propensities are evidenced by quickness and exactness in grasping ideas, good judgment in reaching decisions, accuracy in making statements, promptness in taking action, persistence in following things up, self control in meeting annoyances and carefulness and economy in use of property. The ultimate result of business-like conduct in efficiency.

ETHICAL CONDUCT

In order to emphasize the importance of right-thinking and right-doing, The American Association of Museums has adopted a code of ethics for museum workers. A copy of the code will be sent by the Association upon request addressed to headquarters at The Smithsonian Institution, Washington, D. C. These practical canons are predicated upon three personal qualities: *devotion* to a cause, *faith* in the unselfishness of motives of co-workers and *honor* as a controlling motive of thought and action.

On the borderline between good business and ethics is the matter of etiquette in dealing with the public. The reputation of a museum is created by the courtesy and consideration which is accorded to visitors. Even the youngest assistant shares largely in this guardianship of

[1] Bostwick, Arthur E. Some principles of business-like conduct in libraries. Chicago, American Library Association, 1920, 30 pp. Use which has been made of this booklet in preparing these paragraphs is acknowledged.

good will—the intangible asset which is quite as important in the professional world as it is in trade.

POWERS AND DUTIES

Granted an organization of qualified individuals, successful administration depends upon proper relations between them. Such relations are established in part by observance of the universal laws which govern dealings between superior and subordinate, and in part by wise determination and clear definition of the province and responsibility of each person. An individual should be responsible to only one other individual, namely the one upon whose recommendation appointment is received or may be revoked. This is the fundamental law of group action. If administrative channels of authority and responsibility are not set up in obedience to it, there ensue invasions of rights and insubordinations which lead to misunderstanding, friction and clash.

This principle, as well as definitions of province, is reflected in the recognized powers and duties of trustees and their officers and committees, the director and members of the staff.

Of the Trustees

Trustees, if elected by the members of the museum, are responsible for stewardship to the members as a body. This is essentially equivalent to accountability to the public. Although disapproval of a trustee's services may be expressed in an extreme case by removing him, ordinarily it is shown by failure to re-elect. If members were always alert to the performances of their trustees, the power of election alone would practically assure good trusteeship, but most members are indifferent and therefore it is usual

to delegate to the trustees, by constitutional provision, the power of nominating their colleagues, and as a consequence election becomes more or less perfunctory. In fact, as indicated in the chapter on organization—page 22—the trustees of many museums are the only members of the corporation and therefore form the body in supreme authority.

"The trustee is the representative of the public and, as such, is interested in results as distinguished from methods," which are the business of the director as expert administrator. This distinction is elaborated in succeeding paragraphs, but there is an excellent and interesting discussion of it in Bostwick's article on *The whole duty of a library trustee.*[1]

Of the Officers

In a few museums officers are elected by the membership, but to avoid parallel lines of authority, as well as for the other practical reasons already mentioned, it is better that they be elected by the trustees. The president, as chairman of the board and of the executive committee, is in active charge of all affairs and is responsible to the board. Official actions of the board or the executive committee are given effect by the president; other officers, committees of trustees through their chairmen, and the director look to him. The vice-president has no function except to act for the president during his illness or absence.

The secretary has certain nominal duties, as defined in the by-laws set forth in Appendix B, but the work is usually done by the director or members of his staff, and therefore in many instances the office of secretary is merged with that of treasurer. The duties of the treas-

[1] Bulletin American Library Association, October 1926, 20: 555–557.

urer are taken up later in this chapter in connection with administration of finances.

Of Committees of the Board

Part of the business of the board is transacted by committees, of which at least two are standing committees.

The *executive committee* acts for the board on all matters of business during intervals between board meetings. It is entrusted with financial management, thus making a finance committee unnecessary unless it is desired to have a body to advise the treasurer in the matter of investing funds.

The *accession committee*—sometimes inaptly called *exhibits committee* or *museum committee*—determines policies in matters relating to the collections and exhibits, and passes on accessions. However it need not pass on all details of acquisition since the director should have power to make decisions if expenditure is not involved. The fact that the accession committee ordinarily takes this limited jurisdiction accounts for the circumstance that in museums of art this committee is very active in passing upon accessions, whereas in most museums of science and history it is relatively unimportant. Museums of art alone acquire a majority of their objects by purchase.

Other committees—usually temporary ones—are set up for specific purposes as occasions demand. At each year-end a *nominating committee* is appointed. A *building committee* is needed when a building is under construction, and other committees may be required from time to time. However, it is a mistake to constitute a committee for purposes which fall within the province of the staff. For example,under normal conditions a publicity committee and a publications committee are unnecessary.

Of the Director

The director is responsible to the board *through the president.* No trustee should force the director to recall this fact because of difficulty in carrying out conflicting wishes of two or more persons, and furthermore the director should not be unreasonable in regard to informal relations which trustees other than the president may desire to have with him direct. However, the principle should be recognized and respected, especially by the secretary and treasurer whose dealings with the director may be frequent. The director should be expected to attend all meetings of the board and of committees. He may be asked to retire upon occasions, but this should rarely be necessary. Harmony between trustees and director is essential, and if it exists the trustees will desire the presence of the director at all meetings.

The director should not be required to bring details to the attention of the board. He naturally makes recommendations on any matters of importance, and the trustees should give careful study to his plans in an effort to support them and to become thoroughly familiar with practical aspects of the institution's business. After policies are established, however, the director should be given freedom to carry them out. Trustees should be willing to give help and advice but loath to interfere. A common source of administrative difficulty is the meddling of trustees in the director's affairs. In exercising its authority over the director, the board should be careful not to discourage or thwart him. A director who needs continual prodding or who must be checked at every turn should not be continued in office. A good director deserves, and should be given, reasonable freedom even though the board may not approve fully of every detail of his performance.

Both the president and the director should be prime

movers, but their efforts need never interfere. Together they should develop plans; the president with worldly wisdom, the director with professional knowledge and experience. The president should enlist support; the director should carry out the work.

Of the Staff

The director is chief of staff. Appointments to the staff should be made by the board on his recommendation, and he should be held responsible for acts of staff members. A paid director needs much tact in dealing with a volunteer staff, but in principle the relations between the director and curators should be the same whether or not the curators are employees.

Maintainance of ideal relations between curators should be a constant concern of the director. Any special interest of the director should not bring undue favors to one branch of work and neglect to others which are equally deserving. If the work of one curator must be limited more than that of another, the persons affected should be made to understand the issues involved. Decisions should always be based upon policy—never upon favoritism.

Curators should be guided by the same desire for harmony that should move the director. This will deter them from embarrassing the organization by trying to influence policies except through official channels. This applies to all—even a trustee who may be willing to play a second official role as a curator, or a volunteer worker who may not be a member of the staff. The most important duty of the director is to get things done, and in a small museum progress is slow without the help and cooperation of many people. To enlist cooperation the director must have a reasonably free hand and must be able to exercise tact and ingenuity.

ADMINISTRATION OF FINANCES[1]

The board of trustees is responsible for the financial life of a museum. As head of the institution, the president should take the initiative in providing income, but in order that the museum may have healthy life and growth he should have the support of the executive committee, and of every trustee, as well as the assistance of the director, who functions as professional advisor to the board and as agent of the board in the conduct of all museum business. Although it is the duty of the director to assist in securing funds, the trustees should realize clearly that if the director is burdened with undue financial responsibility, his efficiency as an administrator and as spokesman for the museum is seriously impaired and the general interests of the museum are bound to suffer.

The treasurer is usually concerned more with the care of funds than with the raising of them. The executive committee may advise him in any matters of finance which he is not prepared to handle on his own responsibility, since, as a rule, the board of a small museum does not appoint a finance committee for this purpose. Customarily the treasurer is not an active accounting officer, but rather that member of the board charged with the responsibility of seeing that proper accounts are kept and that they reflect the true condition of finances. The actual work of accounting is carried on ordinarily by a member of the museum staff—sometimes called *bursar* or *assistant treasurer*—who works under the supervision of the director. The treasurer and director should agree upon the principles of accounting, and the director, with

[1] This section and the following five chapters, which are devoted to finance, have been prepared with the collaboration of Paul Marshall Rea, Director of The Cleveland Museum of Natural History and Vice-Chairman of the Committee on Finance and Accounting of The American Association of Museums.

the approval of the board should have these principles put into effect. The treasurer should be responsible to the board for the accuracy of the accounts; the director for the carrying out of financial policies.

In the case of a very small museum the accounting function may devolve upon the director himself. If, to relieve this overburden, the treasurer take up the duties he should remember that he is really assisting the director in this respect.

The director should work under a budget approved by the board and should not be required to secure authorization individually for disbursements. However, extraordinary expenditures, such as those for equipment or collections, are better made by special order of the board. In other words, operating expenses should be budgeted and placed under the control of the director, but capital outlay should be made by the board itself. The chapters on expenditure and plant go into this more fully.

For the sake of promptness and simplicity in disbursement, the director may be given a working fund protected by a fidelity bond, and he may make disbursements as obligations become payable, and secure reimbursements from the treasurer at convenient intervals upon submission of properly supported vouchers. Under this plan reasonable freedom of action by the director in financial matters is coupled with strict accountability to the board through a corporate officer—the treasurer. Both the accuracy of the accounts and their adaptation to the needs of the museum are assured in this way.

XIV

INCOME

THERE are three important classes of museum income: first, appropriations from public treasurers, second, gifts from individuals, and third, income on endowment. Some museums depend solely upon public appropriations and some upon gifts; others are supported entirely by endowment. So far as practicable, however, a museum should develop each of these three possible sources.

The following is a classification of museum income based upon source:

100[1] Public appropriations
- 130 From county
- 150 From city

200 Gifts
- 230 Dues of members[2]
- 250 Contributions
- 270 Bequests

300 Income on endowment

400 Income from other sources
- 430 Fees
  - 433 Admission
  - 435 Lecture
  - 437 Instruction
  - 439 Other services, honoraria

[1] The numbers prefixed to these items may be disregarded at this point. Reference is made to them in the chapter on accounting—pages 88 and 95.

[2] Dues are usually regarded not as the price of membership privileges, but as modest donations. Dues, contributions and bequests for current expenses are all essentially alike; they are gifts whether large or small.

450 Sales
453 Publications
455 Museum objects
470 Interest on bank balances
490 Miscellaneous

PUBLIC APPROPRIATIONS

Some museums receive support from nation or state, but rarely does a small museum secure public funds except from the county and the local governmental unit—whether city, town or village. It is customary for appropriations to be made directly to a museum, but in some instances funds are granted to a school board, a library board or a park board which in turn supports museum activities. Ordinarily this last arrangement is undesirable, principally because it deprives the museum of a certain independence as well as direct accountability to the public, but under some conditions the disadvantage might be outweighed by further removal from politics which is so effected.

City and County Support

Every museum should endeavor to secure the support of both the county and the local administrations. At present the city shows a higher record of museum support—perhaps because it has been cultivated more industriously, but the county doubtless holds greater possibilities and ultimately may prove to be the stronger financial bulwark. The resources of a city are absorbed by extension of its school system, police and fire protection facilities, streets, sewers and parks. In almost every community demands are large and are increasing by bounds. The county, on the other hand, is more stable. Fewer new demands are made upon it than upon the city

and yet its resources increase with the growth of local populations. The county, however, is apt not to be favorably disposed toward supporting a local museum unless local support is given. Therefore both sources of income should be developed.

Capital *versus* Current Funds

A museum may receive public money that is raised in either of two ways, namely, by taxation or by sale of bonds. The distinction between these two classes of funds is reflected not only in the means by which they are secured but also in the purposes to which they may be devoted. An appropriation from tax funds is included in the city or county budget and its authorization is a matter of regular business. On the other hand, assumption of bonded indebtedness by city or county is a special question affected by state laws which limit public debt and which require in many instances that the question be submitted to referendum at the polls. The chapter on campaigns deals with methods of influencing official or popular vote.

Appropriations from taxes are available for current expenses. Proceeds of a bond issue, however, constitute capital and should be used only for purchase of assets. These distinctions are dealt with further in the chapters on expenditure and plant—pages 68 and 75.

Basis of Tax Appropriation

No generally recognized basis of public support has ever been evolved in practice. Most museums that receive any tax funds at all, have flat grants which are determined in amount either by supposed needs or by the attitude of appropriating bodies toward museum work. Such grants range from a trifling amount to one upon which an institution may depend for its entire support.

However, certain museums do receive from the city the proceeds of a specified annual tax—¼ to ⅓ mill per dollar of assessed valuation in the city, being the range of allotments which are most nearly adequate. Other museums which have city appropriations enjoy approximately equivalent support although the amounts of such grants are determined each year without regard to any fixed rate.

For obvious reasons it is desirable that museum appropriations be established upon some basis which will permit of comparing conditions in many cities. Assessed valuation is a more satisfactory datum than population because it measures ability to pay. In the United States, assessed valuation ranges from an average of approximately $400 per capita for small cities in relatively undeveloped regions to about $2,000 per capita for larger industrial cities. Therefore a tax of ¼ mill would give from 10 cents to 50 cents per capita.

It has been suggested that the total of a city's expenditures for all operating purposes be adopted instead of assessed valuation as the basis of measurement, since, by showing what the people are accustomed to do for various services, that figure reflects the temper of a population as well as the ability to pay. For cities of more than 30,000 inhabitants, total expenditures have been calculated and published by the U. S. Bureau of Census, but, unfortunately, statistics for smaller communities have not been obtained since 1912.

The county appropriation, in a number of instances, is equal in amount to that of the city.

Museum Support in the Law

Ten states have laws relating to museum support, as set forth in Appendix D. These laws show marked disparities and most of them make inadequate provisions.

Because of the vital importance of proper legislative background for the support of museums by county and local authorities, The American Association of Museums has embarked upon an effort to secure uniform and improved laws. Institutions seeking public funds would do well to communicate with the Association in order to align their efforts with those of other museums and of the national body.

Performance Before Funds

Almost invariably public support comes as a sequel to public service. Even though the service may be modest, it must show constructive beginnings before governmental authorities can be persuaded to abet it. The complaint is often heard that work languishes because it is not supported, but this is only a feeble excuse for lack of initiative. A constructive plan accompanied by a small sample of performance, and backed up by enthusiasm, seldom fails to enlist funds for development.

The Political Control Bogey

There need be no fear that use of public funds will render a museum helpless against political interference, if terms of acceptance are made wisely—by contract or otherwise. Appendix C bears upon this point.

On the board of a museum which receives public support, it is customary to include one or two public officials as *ex-officio* trustees, but their votes cannot exercise control. There is a possibility of interference in connection with appointments, especially during the formative period when a museum has not had opportunity to establish precedents for sound practice, but vigorous management should override such difficulties. If unwholesome influence is brought to bear, the most a museum stands to lose is its appropriation. Surely it is better to have pub-

lic support at least until difficulties do arise, than never to enjoy it lest embarrassments may ensue. In practice there has been almost no trouble with politics.

GIFTS

Dues of members are discussed in the chapter on the membership—page 34.

Contributions and bequests may be made towards either current funds or capital. A contributor to current funds may be elected an annual member; in fact, membership is commonly conferred in the hope that renewal may be induced in following years. This accounts in large measure for the practice of maintaining several classes of membership with dues ranging into relatively high figures.

The greater the number of gifts represented in income of this class, the better. If a museum becomes dependent upon the generosity of a very few individuals for its maintenance, there is always serious danger from unexpected discontinuance of the support. Twenty contributions of $100 are much more significant than one of $2,000. The importance of a strong membership follows from this principle.

Gifts to a museum which is organized as a corporation not for profit are deductible from income tax returns up to the limit set by law.

Campaigns for Contributions

Contributions are sometimes secured by campaign methods, and with especial success if funds for a definite project rather than for general support are sought. One institution raised money for the purchase of a Ford car by a campaign for dollar contributions.

Experience has shown conclusively that it is not advan-

tageous for museums to share in a community chest. Contributions made in response to a community chest campaign are generally understood to be for charitable not educational purposes.

Grants

In past, libraries and other educational institutions have enjoyed abundantly the munificence of foundations, but only in a few instances have museums received contributions from this source. If the time should come when museums are given the boon of more extensive help of this kind there may be strong basis of appeal in the need for trained directors. A grant for the employment of a director for perhaps five years would make possible constructive beginnings which would seem to be more important than the gains to be derived, for example, from erection of a building.

Bequests

Bequests which are made specifically for current expenses are treated in the same way as other contributions, but it is usual to add bequests to endowment if contrary provision is not made by will.

Restricted Gifts

Donors are usually more ready to make restricted gifts or bequests than unrestricted ones, because the definiteness of a special project is appealing. It is desirable to take advantage of this inclination, but care should always be exercised to see that restricted gifts do not involve the museum in additional expenses which otherwise would not be necessary, and for which no provision is made. For example, a gift for the purchase of exhibits may embarrass the trustees by requiring the purchase of a case for which funds are not available. However, if a

project is part of a program of immediate urgency, the burden is lightened quite as much by a contribution for that purpose as by a gift of unrestricted funds.

There is endless opportunity for exercise of ingenuity in developing special projects. Purchase of an object, a collection or a piece of equipment, printing of a publication, financing of a collecting trip or an expedition—all such definite purposes have strong appeal. The following memorandum prepared by Clinton G. Abbott, Director of the Museum of Natural History, San Diego, explaining how a series of small bird groups was financed, is suggestive of ways in which many other problems might be solved.

"On the little cases which contain our bird groups we set a figure of $50. Of some of the simpler ones, this perhaps covered the cost, but of the more elaborate ones, it did not. However we determined upon that figure and approached some of our tradespeople in the hope that they would pay for, or present, one or more of these groups. It was arranged that, should they so desire, the cases which are readily portable, could be displayed in the donors' windows for as long as they wished. We made suggestions which were followed out somewhat as follows:

"A meadowlark group representing the male in very bright dress, the female, nest and eggs, was paid for by a men's and women's clothing store, and displayed in its window in the early spring with some such slogan as: *Take a pointer from the birds. Now is the time for your new spring clothes.*

"One savings bank paid for two of the little groups. One represented a pair of California woodpeckers storing acorns in the bark of a pine tree; the other represented a pair of California shrikes impaling their surplus prey

on the spines of a cactus. These were placed in the bank's windows, one on each side of the main entrance, and attracted great crowds. The woodpecker case was labeled *The Saving Instinct* and there was a statement that man would do well to follow the example of the woodpecker by opening a savings account at the bank. The shrike case bore a label with the caption: *Looking Ahead* and *Are you providing for the future by storing up your dollars now?*

"A bush-tit's nest was taken by a real estate firm. A mockingbird group, which represents the male in full song, was especially spoken for by a music house.

"Every case thus sold is marked with a neat metal label saying *Presented by So-and-So.* In a few cases, a public-spirited firm gave us $50 for the case, but did not care to display it and let us pick out the subject.

"Of quite a different type was the aid of the B. P. O. Elks in connection with our elk group. We secured by exchange four beautiful animals but had no resources to meet the expense of the large case that was required. Through one of our trustees, we approached a lodge and they agreed to contribute $1,000. Actually the case cost $1,200, but we have placed a tablet on it which reads, *The case containing this group donated to the Museum of Natural History by San Diego Lodge 168 B. P. O. Elks, October, 1924.*"

INCOME ON ENDOWMENT

Income on endowment consists of interest or dividends on stocks, bonds, mortgages, loans and uninvested cash in bank, and rental of real estate in which the permanent funds of the museum are invested. Some institutions derive support largely or entirely from this source and every museum may ultimately secure a degree of stabil-

ity for its work by developing such assured income. Income on endowment must not be confused with endowment itself, which is the subject of another chapter.

INCOME FROM OTHER SOURCES

Admission fees are charged on certain days by many museums, but there is a trend towards free admission of the public at all times. Lectures are usually free, whether for members only or for the public, and therefore are not income-producing. Fees for instruction include the charges made by some museums for conducting parties, and tuitions for special classes, but small museums cannot make such charges as gracefully as large institutions. In fact the total yield from fees of all kinds is usually quite small.

An item which may be developed substantially is sale of objects. Any museum which will undertake to prepare duplicate exhibits to order, may develop a fair income through dealings with other museums.

TOTAL OF INCOME

There are no recognized standards for determining the total of income which a museum should have in order to render effective service to a population of any stated size. In practice a museum usually develops each source to the utmost, and then finds the total to be inadequate to needs. Librarians have agreed upon one dollar per capita as the minimum amount of annual income with which effective library work can be carried on. A museum has very comparable needs, but 25 cents per capita is approximately the average total income—the range being from 20 cents to 50 cents. It will be seen, therefore, that there are relatively few instances of public support on the ¼ mill basis, for as already shown—page 59—this source *alone* may yield

from 10 cents to 50 cents per capita. In most large cities several museums share in this total, and their combined work may be regarded as a community museum program. In small cities, however, one museum usually receives the entire appropriation. In fact the necessity of concentrating forces in this way is doubtless the cause which has produced the all-embracing museum.

In the smallest of communities it may be impossible to finance a museum locally, but through cooperation along lines discussed in the next chapter, museum service should be made feasible even in villages of a few hundred inhabitants. Therefore one cannot well speak of minimum income for the smallest museum.

The extent to which each source of income may most aptly share in the total is not stateable in percentages, but there are certain accepted principles which define the broad lines of an ideal budget of income. The city is called upon by custom to provide annual appropriations for cleaning, policing and upkeep of building and grounds. The city and county ordinarily share in the support of educational work. Gifts usually provide a further substantial part of the budget, and income on endowment should be sufficient to supply the balance—covering if possible the total of all salaries, so that personal services may be secure. Any additional income on endowment, together with gifts and bequests which are restricted to the purpose are employed to purchase objects for the collections and exhibits and to carry on research. The next chapter indicates specifically the items of expense which enter into these various lines of work.

Many museums operate on so small a margin of reserve that borrowing may become necessary at times. As explained in following chapters, plant and endowment are not to be put up as collateral, but museums do borrow against taxes levied but not collected, appropriations

authorized but not received and, in some instances, contributions pledged but not paid. They may borrow upon notes personally guaranteed by trustees, or on open account if their reputation is of the highest.

XV

EXPENDITURE

MUSEUM expenditures are of two kinds: operating expenditures and capital expenditures. Operating expenditures, or running expenses, pay for salary, heat, light, supplies, printing and all of the current activities. They are consumed in service. Capital expenditures, or capital outlays, are for purchase of physical assets, namely, land, building, equipment, collections and books. They are stored up in property values.

Operating expense is incurred in the usual course of business from day to day and from month to month as provided for in the budget. It is met from current income. Capital outlay, on the other hand, is made only after special deliberation, and only when the necessary funds are actually in hand. Recognition of this distinction is important to the clearness and comparability of financial reports. Relatively large outlays of capital are likely to be incurred at irregular intervals, and therefore if mixed with operating expenditures, they cause totals to fluctuate from year to year in a way that masks true conditions. If the two are kept separate, the record of operating expense serves as a guide for future operations, and that of capital outlay indicates the value of the plant.

Rigid observance of the principle upon which the distinction is based would require that every piece of property, whether purchased or constructed in the museum shop, be regarded as a physical asset and that its cost be charged to capital. However, the accounting necessary to keep track of the cost of shop products is regarded as cumbersome and therefore museums customarily count

the full cost of shop work as a part of operating expense. This is also true of expenditures for field work and other collecting activities that yield new objects for collections.

Another exception is usually made in the case of small expenditures for purchase of minor additions to the collections or exhibits—these items being considered as a part of operating cost. The assumption is that any expensive accessions represent more or less fixed values, but that inexpensive ones do not. Distinction is also made between major and minor equipment as a rule. The former, which includes furniture, fixtures, machinery and other relatively costly and lasting additions to plant, is charged to capital. The latter, including tools and inexpensive office or exhibition appliances, for example, is best charged to an operating account. Comparable to this is the usual practice of charging purchases of books to capital while subscriptions to periodicals are charged to current funds—the distinction being based upon the fact that books represent single commitments, whereas periodicals entail expenditures which recur year after year. These various suggestions may seem at first sight to complicate accounting problems, but in fact they simplify them.

The cost of keeping buildings and equipment in repair is chargeable to operating. This tends to keep up the plant without adding to its recorded value, and therefore compensates in part for failure to charge off depreciation each year as is done in business.

FUNDS AVAILABLE FOR OPERATIONS

It has already been pointed out that not all receipts are available for current expenses. Of public funds, for example, those derived from taxation may be applied to operations, but those raised through assumption of bonded

indebtedness may not. Dues of life members and members in perpetuity are customarily added to endowment,[1] and any contributions or bequests made specifically towards endowment or capital for plant are also set aside. All other funds, however, are considered to be available for operations. Trustees frequently use a part of current income for a capital account, but money which has been impounded as capital may not properly be consumed for running expense.

This chapter is devoted to expenditures for operations. The next two chapters take up in turn the outlay of capital for plant and the preservation of capital as endowment.

EXPENDITURES FOR OPERATIONS

A classification of operating costs is shown in the list given below. This array of items may seem to be out of proportion to the limited needs of a small museum, but as a matter of fact modesty in scale of work tends to decrease the amount of expenditure in each of the classes, rather than to decrease greatly the variety of purposes for which commitments are made. A museum that is actively at work even in a small way, usually find its range of expenditure to be essentially as follows:

10[2] Services
- 11 Salaries
- 14 Extra services—professional (honoraria)
- 15 Extra services—clerical
- 16 Extra services—labor
- 18 Audit & bond

[1] See page 35.

[2] The numbers prefixed to these items may be disregarded at this point. Reference is made to them in the chapter on accounting—pages 90 and 95.

20 Maintenance
- 21 Rent
- 22 Repairs & replacements
- 23 Insurance (on building and equipment)
- 25 Heat
- 26 Light
- 27 Water

30 General
- 31 Freight, express & cartage
- 32 Carfare & taxi
- 33 Telephone & telegraph
- 34 Postage
- 35 Stationery
- 36 Supplies (including minor equipment)
- 37 Minor accessions

40 Printing
- 41 Periodicals
- 42 Books & papers
- 43 Catalogs, labels, etc.
- 44 Announcements, tickets, etc.
- 48 Manifolding
- 49 Miscellaneous printing

60 Travel & field work

90 General & miscellaneous
- 91 Memberships & contributions to other organizations
- 92 Subscriptions to periodicals
- 95 Insurance on exhibits
- 98 Entertaining
- 99 Miscellaneous

Expenditures for some of these purposes—salary, supplies and travel, for example—may be made in connection with various branches of activity such as adminis-

tration, care of building and grounds, educational work, library or work of a department of history, art or science. Classification on this basis is treated in the chapter on accounts—page 90.

SERVICES

Adequate provision for salary is vital to the life and success of a museum. In fact, a newly organized museum may profitably make its first substantial commitment for the salary of a trained director. Outlay for building and equipment cannot be expected to yield a proper return in usefulness unless able direction is provided. Even though—as is often the case—some enthusiastic collector or retired teacher or minister who has not had museum experience may be willing to take charge of a museum for small compensation or as a volunteer, there is no ultimate economy in accepting the service. With a trained director, volunteer associates may function effectively, but without professional leadership little can be accomplished.

Salaries paid to directors are not as low as they are sometimes alleged to be. In many instances, untrained individuals in charge of museums receive small compensation, but persons competent to direct museum affairs effectively are able to command reasonable remuneration.

The directorship of a museum is often likened to the presidency of a college. To be sure, there are many museums that are smaller than any college, and the directors of such little institutions ordinarily receive correspondingly small salaries. Museums of moderate size are comparable to small colleges, and large museums to large colleges. The minimum salary for which the services of a well trained director can be secured is probably $2,500 or $3,000. Some quite small museums now pay $5,000 or more.

The ideal solution of the salary problem is to be found in the employment of a consulting director. Small museums require the services of a highly trained person but few can offer opportunities to attract such an individual. However, the joint directorship of several museums in the same county or state would interest many men of real ability, especially at this time, when cooperative developments are attracting nation-wide attention within professional circles. Five museums contributing $1,000 apiece to the salary of a director who could move about from one institution to another, would yield able direction for all. Under the supervision of such a person, a smaller salaried assistant could carry out the work in each museum.

In addition to salary items, it is desirable to provide a small amount each year for honoraria of consultants and lecturers, and for other extra service.

MAINTENANCE

According to *strict* accounting practice, maintenance costs are made up only of repairs, replacements, and insurance on plants. They constitute a separate class of expenditures, entirely distinct from expenditure for operations, since they represent the cost of keeping the plant intact. However, for museum purposes, it is better to include them with the other expenditures shown in the list, since all of these items are customarily, though erroneously, referred to as *maintenance.*

Insurance for museums is complicated by a number of difficulties. Many objects in collections are of little intrinsic worth although they may be irreplaceable. Others may be so valuable that to insure them would be prohibitive in cost. Furthermore a satisfactory type of policy to cover all of the various risks to which museum

materials are exposed has never been developed by the insurance companies. Largely for these reasons, few museums have coverage for their permanent collections, although borrowed objects may be insured. Traveling collections are regularly protected, and the premium is usually divided between the several exhibitors.

Buildings and equipment are replaceable properties and if a museum holds title to them, they should be adequately insured. Property in *public* ownership remains without coverage according to the practice in most places.

Museums are not obliged to pay taxes because they are organized under the laws for corporations not for profit, which are tax-free. However, it is necessary to make special application for immunity.

XVI

PLANT

PLANT consists of land, building, equipment, collections and books. Expenditure for plant is termed capital expenditure, or capital outlay, and the bulk of it is ordinarily from funds secured especially for the purpose either by the action of an official public body or by gift or bequest.

In the business world it is customary for corporations to borrow capital by floating their own bonds, but in educational fields this is not done because, for the most part, the capital assets of eleemosynary corporations are not readily salable, and furthermore these assets are held in trust and the trustees have no right to borrow against them.

LAND AND BUILDING

A municipality, county or other public corporation may properly assume a bonded debt on behalf of a museum, and acquire land and buildings for museum use. If this is not legally possible, an amendment to the city or county charter should be sought as explained further on in this chapter—page 77. Plant made available in this manner naturally does not pass into the ownership of the museum but remains public property. Further construction upon a building so financed may be made possible by subsequent bond issues, and maintenance is commonly provided for by annual appropriations from tax funds. Park land is often set aside for a public museum building, and, if the site is suitable, this arrangement is the ideal one. Under these circumstances it is

desirable for the museum and the city or county to enter into contract giving the museum possession so long as it continues to function as required by its incorporation and making such other provisions as seem necessary. The contract between The American Museum of Natural History and the City of New York, which may serve as a model for smaller institutions, is reprinted in Appendix C.

Figures are not available to show average outlay for museum plant on the part of communities of various sizes, but even if such statistics were compiled it is improbable that any degree of uniformity in practice would be shown except perhaps for large cities. If proper support is given for operations the need in land and building may be expected to determine itself.

If land is provided by the city and the building is to be erected by the museum with its own capital, a different problem is presented. The parallel to this, in a commercial field, is the erection of buildings on leased land. In such a case the usual protection offered to the lessee is tenure for a longer period than the productive life of the building, as, for example, by a ninety-nine year lease. Such tenure of public lands would be difficult for a city to grant although in practice a renewable grant for a short period almost always proves to be a permanent grant.

A second form of protection for the lessee might be that of penalties upon the grantor in case of the termination of the grant. Under this plan the city, in consideration of the readiness of the museum to erect a building of a certain value, would grant land for an indefinite period retaining the right to terminate the grant and repossess the property only upon condition that it pay to the museum the depreciated value of the permanent improvements—provision being made as to the method of apprais-

ing this value. The grant would thus be a temporary one with full power of repossession by the city, but in practice the penalty to repossess would be so severe that there is little chance that it would ever be exercised. If the relationship between the museum and the city should ever become so unsatisfactory as to make a termination of the relationship desirable, the museum would be provided with substantial funds for re-location.

If there is doubt as to the legality of any such contract between city and museum, it should be possible to remove it by amendment of the city charter through state legislation. The following recent amendment to the civic charter of Buffalo is a good example:

> The Council of the City of Buffalo shall have discretionary authority to provide a site and furnish money for the construction and equipment, in all or in part, of a building for the use and occupancy of the Buffalo Society of Natural Sciences. Such a site may be provided either by setting apart for such purpose land owned or acquired by the city for park or playground purposes, or by purchasing or otherwise acquiring land or property not previously devoted to a public use. The Council may provide the money for such site or building or equipment by the issuance and sale of its bonds in such amounts, for such terms, and at such a rate of interest as it may determine, and such bonds shall be issued and sold in the manner provided by this Chapter.

EQUIPMENT

Equipment is purchased with public capital in some instances, but more often it is acquired by the museum with its own funds. As already explained, small items of equipment are not usually purchased from capital

but are charged to operating expense both for convenience and because such materials depreciate rapidly.

COLLECTIONS AND BOOKS

It is an accepted principle that the technical work of a museum is to be carried on with funds derived from gifts and income on endowment. Usually, therefore, collections —including also exhibits and lending material—as well as books are the property of the museum rather than of the city, but this does not apply of course to municipal or state-owned museums or others which are supported entirely from public funds.

XVII

ENDOWMENT

ENDOWMENT is "a fund, the principal of which is invested and kept inviolate and only the income used. . . . The fund thus established is sacred and should not be touched or encroached upon for any object whatsoever; its income alone is available.[1]"

The following quotation from Arnett applies quite as well to museum as to college endowment.

"College authorities frequently use the term *endowment* in a wrong sense, including under that name sums of money given for college buildings and land. A donation for the erection of a . . . building is not endowment, for, in the nature of things, the structure cannot last forever, and is in itself not income-producing. . . . Some college administrators include in endowment certain funds, the principal of which, as well as the income, may be used. If the principal is ever used, the fund of course is but temporary, and hence is not endowment. . . .

"Colleges often receive gifts and bequests without condition. In such instances the trustees are warranted in using the principal, as well as the income, as they choose. They often decide to add these gifts and bequests to endowment, and then later justify the use of endowment as collateral for current loans, for

[1] From page 24 of: Arnett, Trevor. College and university finance. New York, General Education Board, 1922, 212 pp. Extensive use which has been made of this book in preparing this chapter and the next is gratefully acknowledged.

the erection of buildings, or for some other object, on the ground that it includes sums which were given without restriction as to use of principal. When this occurs the finances of the college are inextricably mixed, the inviolability of actual endowment is lost and the amount used in the manner described frequently exceeds the amount of unconditional funds which were included. To obviate any such disaster, and to preserve rigidly the sacredness of real endowment, under no circumstances should any such donation be included in endowment unless it has been set aside as endowment by deliberate action of the trustees. Such action should be irrevocable, and the sum so included should henceforth be treated in the same manner as sums originally given as endowment. *Once endowment, always endowment*, is the only safe and clear rule."[1]

It would be difficult to state in general terms the amount of endowment that is required. Many of the larger museums rely upon endowment for research work and acquisition of collections either in the field or by purchase. However, for a small museum it would seem that income on endowment might ideally be applied to, or at least be sufficient to sustain, those activities which most need stability, namely services of the staff as represented by salaries. In very few instances, however, is this situation to be found. Some museums are supported entirely by endowment; others have no endowment at all. Either extreme is undesirable. Too much assured support tends to produce lethargy and to alienate participation of the public. On the other hand, if there is little assured income, undue stress is likely to be placed upon those who are responsible for the finances.

[1] Ibid. p. 25–26.

Endowment may be unrestricted or restricted. In other words, the income may be applicable to any use or it may be available for some designated purpose only. Unrestricted endowment naturally is more desirable.

An endowment fund may appropriately be known by the name of its donor. In many instances, further recognition is made by giving credit for purchases or activities to which the income is devoted. For example, an object purchased for exhibition may be labeled: *Purchased from the John Smith Fund.* It is highly disadvantageous, however, for any museum to be identified as a whole with an individual, as explained in the chapter on naming the museum—page 19.

SOURCES OF ENDOWMENT

Endowment is derived chiefly from bequests and contributions, but any funds—except public moneys—which are not otherwise committed may be added to endowment. Some museums provide that all unconditional bequests become endowment automatically under a provision of the by-laws.

In order to indicate the exact corporate title and perhaps also in the hope of prompting bequests, a form is printed in the annual reports of many museums. A simple form is the following:

> I hereby give, devise and bequeath to the_____ Museum the sum of _____.[1]

If the community trust plan, which is explained later in this chapter—page 86—is adopted, a longer form is required, and this should either be printed in the annual

[1] Securities and other property as well as cash may be presented or bequeathed to endowment.

report or made available in draft for the use of anyone who is interested.[1]

An effective means of creating endowment with a minimum of sales resistance is to take interest-bearing notes, the principal of which may be paid at the option of the maker, or becomes due upon his decease. If membership in perpetuity is offered as one of the considerations in such a note, failure to pay the principal in full within one year after the death of the maker would break the contract and release the museum from continuing the membership.[2] The chief advantages of this plan are that

[1] The form is as follows:

I give, devise and bequeath to the _____ Trust Company (or National Bank) the sum of $____ (to be known as the_____ Memorial Fund), IN TRUST, for the public educational, charitable and benevolent uses and purposes and upon all of the terms and conditions contained and expressed in the Resolution and Declaration of Trust adopted by the Board of Directors of said Trust Company (or National Bank) on the____ day of_____, 19__, creating the _____Community Trust, of which a copy is incorporated herein and set forth at the end of this paragraph, provided, however, that I desire that the net income thereof shall be expended in support of the work of the _____ Museum.

This phraseology, which has been determined upon by The New York Community Trust, may require minor modifications to apply to community trusts in other cities. In New York State the Resolution and Declaration of Trust need not be incorporated in the will. Reference to it as filed in the office of the Secretary of State at Albany and in the county office is sufficient.

[2] The following is a possible phrasing of the note:

In consideration of the cancellation of my pledge as a _____ Member of the _____ Museum and of the agreement of said Museum to enroll my name as a _____ Member in Perpetuity, and in further consideration of the participation by others in the endowment of said Museum and of expenditures made or to be made in reliance upon the endowment created by this and other notes, I promise to pay to the _____ Museum the sum of _____dollars with interest from _____ at five per centum (5%) per annum, payable quarterly in advance on the first day of January, April, July and October. The face of this note may be paid in full or in installments at my convenience, but unless previously paid in full, shall become due and payable upon my decease. The face of this note, when paid, shall be kept intact as a part of the General Endowment of the Museum, and the income applied without restriction to any of the corporate purposes of the Museum.

it serves to cement the relations of a member to the museum and yields practically assured endowment without bearing so heavily upon the patrons of a museum that other contributions are necessarily forestalled.

Sums pledged to endowment should not be entered on the books as endowment until the pledges or notes are actually paid. Annual interest payments should be treated in the same way as the dues of an annual member until the principal is in hand.

Endowment policies or regular life insurance policies offer means by which museums may be given substantial, though deferred, contributions through small regular payments. This possibility has been largely neglected in the past, but there are indications of an increasing tendency on the part of insurance representatives to emphasize the availability of life insurance for the purpose of setting up endowment funds for institutions.

INVESTMENT OF ENDOWMENT

Investment and reinvestment of endowment funds should concern every trustee of a museum.

> "As endowments are established to provide permanent regular income, it is important that they be invested in such a way that the income shall be assured and the principal kept intact. Safety of principal is the first consideration; otherwise, the permanency of

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This form is used by The Cleveland Museum of Natural History to replace an annual membership by a membership in perpetuity. If it were for the signature of a non-member, the first phrase would be omitted and the note would begin: *In consideration of the agreement of the_____ Museum to enroll my name*, etc. If the note were given for an amount too small to meet the minimum requirements of a membership in perpetuity, it would begin: *In consideration of the participation of others in the endowment of the _____ Museum*, etc. If the total of the annual interest is small it should, of course, be payable in one sum.

the income may be endangered. The size of the income, though important, is secondary. The scale of expenditures expands quickly to equal an increasing income, but does not respond easily when income diminishes. It is, therefore, in the long run better to have a stable income, even if somewhat smaller than might be obtained temporarily, than to enjoy a larger income for a short period and later to be obliged to reduce expenses because of its curtailment."[1]

Securities issued by the federal and state governments, obligations issued by cities having over 25,000 inhabitants and real estate mortgages on improved property are recommended by Arnett as best investments for endowment.

"Investments of a purely speculative character, such as stocks of mining corporations and of new companies whose stability has not been demonstrated, are not suitable. As a rule, common stocks should be avoided. If any exception is made, it should be in favor of well-established companies with a large margin of surplus and a regular dividend record covering a long period. Carefully selected first mortgage bonds and real estate first mortgages on improved farms in good localities, preferably in the same state as the college, or in contiguous states, and first mortgages on city property where the college is located, or in nearby cities, make proper investments. The proximity of the property mortgaged makes it easier to learn its value and to note any circumstances which might lead to its depreciation. Since real estate mortgages usually run from three to five years, no serious depreciation in value should occur in that time which was not foreseen by the trustees. Loans secured by mortgages should not exceed 50 to 60

[1] Arnett, p. 32.

per cent of the appraised value of the property. The value should be established by personal investigation by the college authorities, assisted, if necessary, by a person skilled in real estate values. The title should be examined by an attorney, and no loan should be made unless the title is clear, preferably guaranteed."[1]

It is important also to diversify investment in order to distribute the risk and so practically to insure against sweeping financial reverses.

There are two plans for investment of separate endowment funds:

"Every fund may be invested separately; or funds may be invested as a whole, each fund sharing in the income in the ratio that it bears to the total of the funds. Reasons may be given in favor of each plan. Under the first, any profit realized on the investments benefits the fund to which they belong, but on the contrary any loss diminishes it. If it happen that the investments yield a high rate of income the object for which the fund was given receives the advantage, while, conversely, if the rate is low it suffers the disadvantage. Colleges do not always have freedom to choose which of the two methods they shall employ because donors sometimes stipulate that the fund given by them shall forever be kept separate and separately invested. Securities are sometimes given in which the trustees themselves would not invest, though the donor, through his knowledge of the circumstances affecting their value, thinks highly of them. It is better to carry such securities in a separate account until they are paid or disposed of, and the trustees have invested the proceeds in securities of their own selection. If any endow-

[1] Ibid. p. 33.

ment is of considerable size it may be invested separately to advantage, but if it is small there is greater difficulty in keeping it fully invested.

"The second plan, viz., the combination of funds and their investment as a whole, has several arguments in its favor. In the first place, it obviates the necessity of keeping separate accounts and records to show the investments belonging to each fund; second, the cash uninvested consists of one sum and can be invested more readily; third, each fund receives the same rate of income; fourth, the rate of income is less likely to vary from year to year because of the amount and variety of investments; lastly, each fund is preserved from extinction because the losses and gains are divided among the funds pro rata, thus assuring the perpetuation of every fund unless it should prove that all investments become of no value, a contingency in the highest degree improbable.

"From the foregoing it will be apparent that a college whose funds are at all numerous may probably use the two plans of investment simultaneously—the individual method where the conditions of gift or circumstances require it, and the group method in the case of all other funds."[1]

DELEGATION OF RESPONSIBILITY

If the trustees of a museum are not intimately familiar with financial management, the responsibility of investing and reinvesting endowment may advantageously be delegated to a trust company. If this is to be done, the community trust plan should be considered, since it combines certain larger benefits with the convenience and efficiency which attach to the services of a trust company.

[1] Arnett, p. 37–8.

A community trust is a form of association between a group of reliable trust companies and national banks in a city, and a so-called *distributing committee* composed of citizens appointed by eminent leaders in the community. Its purpose is to administer endowments in such a way that the donor will know that the safety and wise stewardship of his gift are assured, and also that never, so long as civilization shall endure, will the fund become useless and ridiculous by virtue of changing times and passing needs. In little more than a decade the plan has been put into operation in fifty-four cities.

A fund may be given or bequeathed to a community trust for any specified purpose, such for example as the work of a designated museum or some particular branch of that work.[1] The fund is thereby placed in the hands of one of the associated trust companies or banks which assumes responsibility for it. The income is paid to the museum to be used under the terms of the gift, and so long as the purpose for which the endowment fund was created continues to be a legitimate and reasonable one, the plan goes no further. But if, after the passage of years, the museum should cease to exist, or its work should be so modified that the original purpose of the fund were stultified, then the *distributing committee* would have power to decide upon a related work to which the income could be devoted. There are many instances of endowments, rendered useless by the change of times, piling up funds in impotence while lawyers try interminably to untie legal knots. The appeal to donors of the far-sighted community trust plan should in itself constitute a strong inducement for museums to employ it.

[1] The form of gift or bequeathal is given in a footnote on page 82.

XVIII

ACCOUNTS

THE financial records of a museum should be simple but not crude. Standard books are no more difficult to keep than improvised ones; in fact, they are likely to be much less troublesome in the long run. An accounting system such as that about to be described involves very little routine work if transactions are few. It may seem to be cumbersome, but in practice it is entirely simple, and many of its features assume trivial proportions when applied to conditions in very small museums.

THE RECORDS

The following financial records are recommended:

RECEIPTS REGISTER

This is a bound book in which to enter a record of each payment received. Beginning at the left it has columns headed *date*, *received from*, *amount*, and *fund*, followed by a series of columns for income accounts corresponding to the various sources enumerated on page 56. The numbers as well as the names of accounts may advantageously be shown in these headings, since the numbers are employed as symbols for designating the accounts in other financial records. If desired for space economy, several related accounts may be carried in a single column—the following column in every such case being reserved for notation of account numbers to identify the entries. By the same means, divisions of accounts may be differentiated. For example, *230 Dues of Members* may be resolved into 231 *Active*, 232 *Contributing*, etc.

The receipts register is used for all receipts except of

endowment. It is generally considered undesirable for additions to endowment to be entered in the same book with receipts of funds which are available for disbursement or outlay, and therefore a separate book—the endowment cash book—is provided, as shortly to be explained.

To record a receipt in the register, the amount is entered in the *amount* column. If the money is intended for a *special* fund, the fact is noted in the column headed *fund.* The amount is then entered again in the column under the proper account heading to show the source from which it is derived, except that if two or more accounts are involved in one receipt, the component parts of the total are entered separately, each in its appropriate account column.

When a bank deposit is made, a line is drawn across the *amount* column and a total struck. By carrying the total to the left margin, insertion of confusing sub-totals in the *amount* column may be avoided. This total should check with the deposit as recorded in the pass book or on a duplicate copy of the deposit slip receipted by the bank.

A stock book may be used for the receipts register. Any good stationer carries a range of sizes from which one with at least the required number of columns may be selected.

Disbursements Register

This is a bound book in which to enter a record of each check drawn. Beginning at the left it has columns headed *date, paid to, check number, amount* and *fund,* followed by a series of perhaps a dozen columns for expense accounts grouped by departments, as still to be explained. Alternating with these last should be columns in which to note alongside each entry the number of the account to which it applies.

The following set-up of accounts is a possible one, but without changing it basically, it may be expanded or condensed to suit the needs of an institution of any size. For a very small museum, many of the accounts would be dropped. Salary, for example, would probably appear only under *Office & administration.*

EXPENDITURE FOR OPERATIONS—

600 Office & administration
- 611 Salaries
- 614 Extra Services—professional (consultations, legal, etc.)
- 615 Extra Services—clerical
- 616 Extra Services—labor
- 618 Audit & bond
- 631 Freight, express & cartage
- 632 Carefare & taxi
- 633 Telephone & telegraph
- 634 Postage
- 635 Stationery
- 636 Supplies
- 644 Announcements, tickets, etc.
- 648 Manifolding
- 661 Travel
- 691 Memberships & contributions to other organizations
- 698 Entertaining
- 699 Miscellaneous

700 Building and grounds
- 711 Salaries
- 716 Extra services—labor
- 721 Rent
- 722 Repairs & replacements
- 723 Insurance (on building and equipment)

725 Heat
726 Light
727 Water
731 Freight, express & cartage
736 Supplies
799 Miscellaneous

800 Education
811 Salaries
814 Extra services—professional (lecturers fees etc.)
832 Carfare & taxi
835 Stationery
836 Supplies
837 Minor accessions
848 Manifolding
849 Miscellaneous printing
861 Travel
899 Miscellaneous

900 Library
911 Salaries
915 Extra services—clerical
922 Repairs & replacements (including book binding)
931 Freight, express, & cartage
934 Postage
935 Stationery
936 Supplies
992 Subscriptions to periodicals
999 Miscellaneous

1000 Membership & publicity
1011 Salaries
1032 Carfare & taxi
1033 Telephone & telegraph
1034 Postage

1035 Stationery
1036 Supplies
1048 Manifolding
1049 Miscellaneous printing
1099 Miscellaneous

1100 Preparation & exhibition (including photography)
1111 Salaries
1136 Supplies
1199 Miscellaneous

1200 Publications
1241 Periodicals
1242 Books & papers
1243 Catalogs & labels

2000 Department of History
2011 Salaries
2015 Extra services—clerical
2036 Supplies
2037 Minor accessions
2061 Travel
2062 Field work
2099 Miscellaneous

2100 Department of Art
Same accounts, and:
2195 Insurance on exhibits

2200 Department of Science
Same accounts as 2000

OUTLAY FOR PLANT[1]—

A 3 Equipment
A 4 Collections
A 5 Books

[1] Accounts for land and building may be opened when, and if, needed.

It will be observed that this classification repeats under several department headings, appropriate selections from the list of expense accounts given on page 70. The prefixed numbers are explained in connection with the ledger.

To record a disbursement in the register, the amount is entered in the *amount* column. If the money is drawn from a *special* fund, the fact is noted in the column headed *fund.* The amount is then entered again in the column under the proper department heading and the account number is set down in the column alongside. If two or more accounts are involved in one disbursement, component parts of the total are entered separately, each in its appropriate department column and each with its account number adjacent.

A stock book similar to the receipts register may be used for the disbursements register.

Endowment Cash Book

Endowment is kept in a separate bank account in order to avoid confusing it with other funds. For the same reason, receipts which represent additions to endowment, as well as receipts from sale of endowment securities, and disbursements growing out of investments and reinvestments of endowment funds, are recorded in a separate book. For a small endowment, few entries are likely to be made and a plain note book is quite sufficient.

Checks

Checks bound in books are not as satisfactory as loose ones, each bearing at the bottom a detachable stub with spaces for showing the purpose of the payment. The stub is intended to be torn off by the recipient, leaving a plain check to go through the bank. The advantage of such checks are that, first, the detachable stub explains the check and saves writing a letter of transmittal, sec-

ond, the checks may be typewritten since they are not bound in a book, third, carbon copies may be made for the files to take the place of separate vouchers, and fourth, these copies are more dependable than ordinary check stubs since the latter, being made out independently by hand, may conceivably be in error.

The use of *voucher* checks, having inseparable stubs, is declining. Banks do not favor the odd sizes in which such checks are made, and there is a certain accounting objection to them on the ground that they promote incompleteness of financial record by encouraging discard of supporting papers.

It is proper, if desired, that the treasurer or his alternate countersign checks on the signature of the director. Ordinarily, however, the signature of the director is enough.

Vouchers

A voucher is a blank form upon which all the facts concerning a payment are noted, and to which invoices or other supporting papers may be attached for filing. If loose checks with stubs, such as those recommended above are used, the carbon copy makes an ideal voucher. For economy, a *blank* sheet of the size of check and stub together may be employed in the place of a printed duplicate form.

Each voucher should be initialed by the person having first-hand knowledge of the details. The vouchers should be filed in numerical order and to them the original checks should be attached after they have passed through the bank.

Ledger

A standard double-entry, loose-leaf ledger is best. By the use of colored sheets inserted after any regular white

sheet, an account may be divided to show any desired analysis of its items—the total of subordinate accounts equaling the total of the control account. This plan is especially useful in separating transactions relating to restricted funds.

Use of the ledger in accounting for operations, plant and endowment is explained in several subsequent sections of this chapter. Whatever its nature, every fund restricted to a special purpose should be carried in a separate account. Impairment of special funds by pooling with general funds has been all too common.

As already indicated, accounts are usually numbered in order to facilitate reference to them in the records, and also to provide a key to arrangement of sheets in the ledger. When numbers are assigned the following rules may well be observed:

1. Numbers should differentiate between asset, liability, income and expenditure accounts as follows, for example:

Assets	A 1 to A 59
Liabilities	L 60 to L 99
Income	100 to 599
Expenditure	600 and up

Although the letters prefixed to asset and liability accounts are not essential, they are helpful in distinguishing these accounts at a glance.

2. Numbering for expenditure accounts should employ hundreds for major groups, such as departments and special funds, and tens and units for the divisions—the last two digits of a number having the same significance wherever used. Thus in the list of accounts suggested, 11 stands for *salaries*. Salaries for *Office & administration* are 611; for *Library*, 911. Some accounts, such as heat

or light, may appear in only one department, but others are likely to occur in nearly all.

3. When first assigning numbers, it is desirable to skip some in order to provide for interpolation of new accounts. On the other hand, consecutive numbers may be used where the list is believed to be in final form, and they *must* be used of course where there are just enough to go around.

4. If practicable, the numbers 9 and 90 should be reserved or given the significance of *miscellaneous* or *other*, to provide indefinitely for unforeseen needs.

Card Ledger of Members and Contributors

Instead of a colored ledger page for the subordinate account of each individual member or contributor, a small file card may better be used. The file of these cards, which is usually called the *membership ledger*, may also serve as the official list of members' names and addresses. A standard 5 by 3 inch card is large enough. It should be ruled into columns for *debit*, *credit*, *date* and *remarks*, and marginal colored tabs may be employed to visualize the status of the account on each card. A patent visible file with colored signals is ideal.

Petty Cash Slips

Small *cash* disbursements may be made from a petty cash fund of $10 or more, and each is recorded on a so-called *petty cash slip*. When the fund nears exhaustion, the accumulated items are totalled and a check drawn to reimburse the fund—all the supporting slips being attached to the voucher, upon which an analysis of the items is noted for posting in the ledger in due course.

For any cash disbursement of more than perhaps $5, a separate check should be drawn and cashed. However,

most disbursements of this size are made by check drawn to the creditor.

Journal

The old-fashioned journal was a sort of planning book in which a bookkeeper, for the purpose of organizing his thoughts, set down the debit and credit for each entry to be made in his books. This practice is obsolete. The journal is now used to set forth entries which do not originate in the receipts or disbursements registers, such for example as gifts of securities, transfers between accounts and corrections of errors.

Loose journal slips are recommended because they are more convenient than the pages of a bound book for attachment of supporting schedules or documents that are associated with many entries. The slips are numbered and filed in sequence.

List of Investments

As a supplement to the endowment cash book and the ledger accounts of endowment, a card list of investments should be made. Each security should be described and its cost and par value noted. Obsolete cards which are eliminated from the current file should not be destroyed.

Inventory of Plant

As a supplement to the ledger accounts of purchased plant, a descriptive summary of *all* plant should be kept under headings: *land*, *building*, *equipment*, *collections* and *books*. Items which represent cash transactions should be listed first under each heading and should have notations of cost which check with the ledger; additions to plant by gift should be listed next under each heading and may have notations of appraised value. Equipment may well be itemized fully. Collections and books need

not be recorded in detail but may be entered as follows: accession numbers and cost of purchases, accession numbers and appraised values of important gifts, monthly lump estimates of the value of other gifts.

This inventory is very easy to keep, and is exceedingly useful at the time of making an annual report.

ACCOUNTING FORMS

The only accounting form essential for all museums is the *bill*. Bills for accounts other than membership should be made out in duplicate and the carbons retained as memoranda. Bills for membership may be stamped or printed but copies of these need not be made since record of them is preserved by presence of the cards in the membership ledger. Letters, not bills, are usually employed to solicit renewals of subscriptions.

Bill forms may also be used as receipts.

Museums having annual operating expenses of perhaps $25,000 or more should use requisitions and purchase orders so that accurate record may be kept of commitments as well as of actual disbursements. However, the use of these forms by smaller institutions is not recommended because of the routine involved.

ACCOUNTING FOR OPERATIONS

Current operations are charged to the accounts shown in the disbursements register. It will bear repeating that transactions under restricted funds should be charged to separate accounts—one for each fund. If each of such restricted fund accounts is divided in the ledger into any desired number of subordinate accounts which correspond to the unrestricted operating accounts, it becomes a simple matter to combine records of disburse-

ments from restricted funds with those from unrestricted funds for purposes of analysis or report.

ACCOUNTING FOR PLANT

As already indicated, there should be an account for each class of property purchased by a museum: land, building, equipment, collections and books.

The first two of these are not regularly active. When building is in progress, subordinate building accounts are sure to be needed, but when construction is finished the total of expenditures should be closed into the control account and disposition made of any deficit or balance. Public land or a publicly owned building occupied by a museum is not accounted for in any way. If, however, a museum expends public capital for construction which, of course, becomes public property, an entirely separate ledger should be opened for the accounts in order that they may not be confused with the museum's own financial records.

The accounts for equipment and collections are relatively active as a rule, and therefore they may require standing subordinate accounts, corresponding to the various museum departments: history, art and science, perhaps. Books are carried in one account because all of them are assigned to the library, even though some may be for exclusive use by one or another curator.

It is not customary to charge off depreciation of plant as is done in business. This would be meaningless in the case of irreplaceable property, and it would be needless in the case of property provided by gift and to be replaced only by gift. Furthermore, unless there is special endowment for upkeep of the property, depreciation would have to be set aside from current income, and every gift would impose upon the trustees the immediate obli-

gation of accumulating from current income a fund adequate to replace it for all time. Manifestly this would be unfair, and hence the proper course is to show what goes into plant, writing it off only when the property is abandoned. Arnett says:

> "Plant should be carried on the books at cost, and the amount thus carried should equal and account in detail for all funds used in acquiring it. . . . In case any of the plant were offered for sale, the price placed upon it would depend largely upon what could be obtained for it, and not upon the value given on the books. Therefore, to carry it at cost is the logical method."[1]

However, it may be noted parenthetically that in the case of property in which *endowment* funds are invested provision must be made for charging depreciation against current income to prevent the depletion of endowment. This is considered presently.

All of the foregoing discussion applies to records of cash transactions—*purchases* of additions to plant. *Gifts* of objects, books or any property other than cash or securities are not recognized in the accounts proper, although a memorandum of them should be made in the inventory of plant.

As previously explained, collections and exhibits that are of small cost and any that are acquired through field work or are prepared in the museum's shop, need not be put on the books as a part of the plant. The cost of acquiring them is simply paid out of current funds. It would make the accounts more complete to charge over to capital funds the cost of shop and field products, but

[1] Arnett, p. 55. See reference in footnote on page 79.

the slight gain would hardly justify the trouble of keeping records of time and material.

ACCOUNTING FOR ENDOWMENT

If a museum's endowment is either entirely unrestricted or all restricted to a single purpose, it is invested as a whole and is carried on the ledger in one account. Otherwise the method of accounting depends upon that adopted for investing, as explained in the chapter on endowment—page 85. Every fund which is invested separately must have its own separate account. All uninvested balances are ordinarily deposited in a single bank account—*one for endowment only*—and ledgered in one account with a subordinate account for each special fund represented. Sales of endowment securities and reinvestments occasion receipts and disbursements which are entered first in the endowment cash book.

"Investments of endowment should be entered on the books at cost. In this manner the funds can be fully and accurately accounted for. The following equation should always be maintained: Endowment investments at cost plus endowment cash awaiting investment should always equal total of endowment.

"One principle must be kept constantly in mind, namely: . . . accounts should be the record of actual transactions. If securities are entered at par value, as is often the case, it may be difficult to account fully for endowment funds, and the equation given above is not preserved."[1]

"Preservation of the principal being a most essential feature of endowment, gifts of securities and property should be accepted at their market value at the date of gift. If that value cannot be ascertained read-

[1] Ibid. p. 35–36.

ily, a competent person, or persons, should be asked to estimate their value as of that date. . . .

"Real estate is often given for endowment, which, in the course of time, increases in value because of changing conditions. Even in these, as in other cases, it should be carried on the books at its real value at the time when it was given, and no change should be made except to record expenditures for additions and improvements, which increase the value of the property. Buildings will of course depreciate in the course of time and become valueless. Provision for the diminishing value must be made each year by charging its amount against income so as to keep endowment intact.

"Cognizance should not be taken of any increase in value in real estate not actually realized by sale. When the property is sold and the profit actually in hand, the endowment should be augmented by the amount of the profit. The figures on the books should at all times represent actual transactions and should not be modified to record estimates of changing value."[1]

"The amount of endowment should remain unchanged from year to year except as it may be augmented by additional gifts or by profits realized from the sale of investments or diminished by losses incurred in disposing of them."[2]

BUDGETS

Before the beginning of each fiscal year, the director should prepare itemized estimates of income and expenditure for the year. These estimates are subject to revision by the trustees, and upon adoption by them become the budgets upon which all transactions should be based.

[1] Arnett, p. 29–31. [2] Ibid. p. 37.

The budgets are subject to revision by the trustees either to take account of unexpected changes in estimated income, or, if the director has not the authority, to re-adjust appropriations between expense accounts.

The budget of income should be conservative; only reasonably assured income may properly be included. The budget of expense should not exceed assured income in its total. Every museum has boundless opportunity, but its work must be limited by its means. In fact a margin of safety is usually provided by making a certain expense appropriation to a so-called *contingent fund*. This fund is really a tentative reserve from which no expenditures are made, but from which amounts may be transferred to other budget accounts by action of the trustees. A deficit in some account may have to be made good in this way, and therefore the contingent fund is seldom molested before the end of the fiscal year.

The itemization of the budgets should correspond to the set-up of income and expense accounts. Elaborate department budgets to which salary items and other *fixed* expenses are distributed are not necessary, but items of expenditure in which more than one department of a museum is concerned are best split up into department budgets following the lines of the set-up of expense accounts. In this way curators may be relieved of competing for shares of a general fund.

The means which are employed for exercising budget control should be as simple as the scale of operations allows. For *strict* control of very active accounts, comparison should be made between budget and disbursements *plus commitments*, since disbursements alone do not necessarily show the true state of affairs. The proper way to provide for such a comparison at any time is to keep a memorandum record in a book or on file cards—charging commitments to their accounts *as they are incurred*, and

taking note of unexpended balances. This system requires that entries be checked up when disbursements are made in order that discrepancies between anticipated cost and actual cost may be detected and allowance made.

However, such budget control is unnecessarily involved for most small museums. Direct comparison of each monthly statement of receipts and disbursements—a statement described in the close of this chapter—with the budget, yields sufficient information for practical purposes.

THE MONTHLY REPORT

Each month the executive committee should require a memorandum report of receipts and disbursements, which may be cast in the form of an eight-column statement, as follows:

Income Accounts	*Budget for year*	*Receipts to date*	*Receipts in month*	*Expense Accounts*	*Budget for year*	*Disbursements to date*	*Disbursements in month*

THE ANNUAL REPORT

There are two fundamentally different points of view in accounting. The first is that of the auditor, who is concerned primarily with tracing all income into disbursements or balances; the second is that of the executive, who is concerned not only with this, but also with soundness and efficiency of the work which is accounted for. Both viewpoints are recognized in any useful accounting system and both should be brought out in the

annual report. If the viewpoint of the auditor be pre-eminent—as frequently it is—a report conveys slight information about the work which it represents, and if published, holds little of value even for those who are interested.

A proper annual report has four parts, and customarily is prefaced by an introductory statement which surveys the financial situation and compares it to that of the previous year or years. The parts of the report are:[1]

Balance Sheet

This should show in summary the assets and liabilities of the museum under the three main headings: *endowment, plant* and *operating accounts.* The balance sheet gains in significance if presented in comparative form, showing conditions at the beginning and the end of the year.

Statement of Receipts and Disbursements For Operations

In this statement it is important that a clear picture of the work be given by proper itemization.

List of Gifts

This is a list of gifts of cash and securities only. Gifts of other property are included in the inventory of plant.

Explanatory Schedules

A number of explanatory schedules are usually appended to set forth the details which enter into certain

[1] Arnett (pages 106–115) has been followed in this discussion because his analysis, though of college reports, is also descriptive of the best practice followed by museums. Preparation of the annual report may well be guided by the auditor, upon whom the director should be able to lean for information such as that given in considerable detail by the author cited.

items in foregoing portions of the report. Footnotes are used to make references to the items explained. The following schedules are required by most reports:

ENDOWMENT INVESTMENTS—A list of securities in which endowment is invested, showing the cost (book value) and par value of each.

INVENTORY OF PLANT—a classified summary of purchased property constituting plant, with notation of cost. The total of costs should account exactly for the value of plant as shown in the balance sheet. Separately under each heading, property received by gift and its appraised value may be shown. This schedule is a very brief summary of the recorded inventory of the plant. It should not contain long lists of gifts.

REPORTS OF SPECIAL FUNDS—statements of receipts and disbursements separately for each special fund. In the general statement of receipts and disbursements, special fund transactions are distributed to various accounts; in this schedule they are segregated—fund by fund.

STATISTICAL SUMMARY

It is exceedingly important to museums throughout the country that their combined financial experience be known. If a majority of published annual reports were in proper form it would not be difficult to compile statistics each year, but as it is, few of them show all of the main facts. In an effort to secure comparable summaries for collation, The American Association of Museums annually sends the following blank form to each of its institution members, with a request that the indicated facts be reported.

FINANCIAL STATISTICS FOR PUBLICATION

Covering fiscal year ending:
Museum:

INCOME

Unrestricted

From state.....$
From county.....
From city.....
Income on endowment.....
Bequests, contributions, dues.....
From other sources.....$

Restricted to use for land, building, equipment

From state.....$
From county.....
From city.....
Income on endowment.....
Bequests, contributions, dues.....
From other sources.....$

Restricted to purchase of collections

From state.....$
From county.....
From city.....
Income on endowment.....
Bequests, contributions, dues.....
From other sources.....$

Other restricted income.....$

Additions to endowment during year.....

Total Income..... $

EXPENDITURE

For operations.....$

For purchase of land, building, equipment.....

For purchase of collections, books.....

Total Expenditure.....$

To THE AMERICAN ASSOCIATION OF MUSEUMS,
HEADQUARTERS AT THE SMITHSONIAN INSTITUTION,
WASHINGTON, D. C.

Date: By:

Whatever the system of accounts in use, these facts should be easily ascertainable, and it is hoped that increasing numbers of museums will render annual statements and that ultimately a substantial body of useful information may be collected.

XIX

OFFICE METHODS

PROMPTNESS and efficiency are just as important in the office work of a museum as of a business. That the staff is over-burdened is not an excuse for crude methods and delinquency; rather it is a reason for efforts towards greater effectiveness. With certain minimum equipment, a few simple methods and some part-time clerical help, even the smallest museum should be able to conduct its office work in a business-like way and at small expense.

CORRESPONDENCE

All letters should be typewritten, and carbon copies kept. The cheapness of a rebuilt typewriter and the ease with which anyone can learn to operate a machine would seem to make unnecessary the practice of correspondence in long-hand. Files are essential. All letters should be put in one alphabetic series under the name of the person whose signature appears on an incoming letter or to whom an outgoing letter is addressed. It will be found convenient to make an index card for each organization that is represented and to list on it the names of individuals therein, with whom correspondence has been held.

A follow-up system should be adopted for several purposes: to bring letters to the notice of proper persons, to check up on replies to letters that are dispatched, to assure required attention at future dates to letters that are received, and to keep record of all correspondence on particular subjects. A very simple system is one which employs the two stamps shown in Plate 6. These stamps are

set on any letter or carbon copy which represents unfinished business.

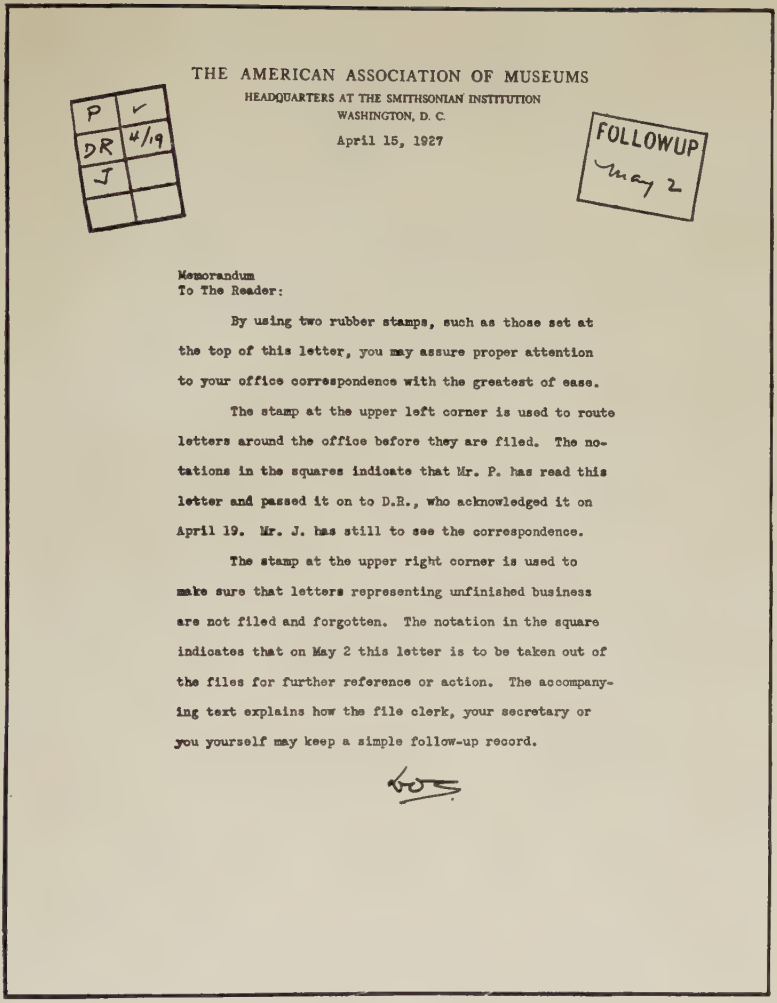
Use of the stamp at the left, which is for the first purpose mentioned above, is explained in the plate. The stamp at the right serves the other three purposes. If on a certain date the reply to a letter should be in hand or something further should be done about a letter already received, that date is jotted in the square. Incidentally, it saves trouble to mark all letters for follow-up on Mondays, since this practice calls the system into operation only once a week. If a letter relates to a subject upon which all the correspondence may be desired later, a word which suggests the subject is noted in the square. Each letter so stamped is then recorded by name and date on a sheet headed by the key-date or key-word which it bears—all letters with the same date or the same word being listed on one sheet. Letters should then be filed and the follow-up sheets consulted every Monday morning. This system is economical of time and precise in its working.

MEMORANDA

Unsystematic memoranda can make a great deal of trouble. A good plan is to use only two sizes of scratch stationery—letter size for extensive memoranda or manuscript and 5 by 3 inch for all short notes. If memoranda are made horizontally on the little slips, with a separate slip for each subject, the notes are interchangeable with cards in index drawers and are convenient in many other respects.

DEVICES

An addressing machine is almost a necessity for mailing circulars, notices and publications to members if the



THE AMERICAN ASSOCIATION OF MUSEUMS
HEADQUARTERS AT THE SMITHSONIAN INSTITUTION
WASHINGTON, D. C.

April 15, 1927

P ✓
DR 4/19
J

FOLLOWUP
May 2

Memorandum
To The Reader:

By using two rubber stamps, such as those set at the top of this letter, you may assure proper attention to your office correspondence with the greatest of ease.

The stamp at the upper left corner is used to route letters around the office before they are filed. The notations in the squares indicate that Mr. P. has read this letter and passed it on to D.R., who acknowledged it on April 19. Mr. J. has still to see the correspondence.

The stamp at the upper right corner is used to make sure that letters representing unfinished business are not filed and forgotten. The notation in the square indicates that on May 2 this letter is to be taken out of the files for further reference or action. The accompanying text explains how the file clerk, your secretary or you yourself may keep a simple follow-up record.

FOLLOW-UP STAMPS AND THEIR USE.

list is a long one. A machine using metal stencils is best. If a local dealer cannot make stencils, they may be secured by mail without delay.

A mimeograph is useful to save printer's bills. Attention is called in another chapter—page 293—to use of the mimeograph for producing serial publications and even books.

XX

PROGRAM

THE trustees of every museum should have a well considered program looking many years ahead, and they may profitably have it committed to paper since few operations are as clarifying to thought as that of writing. From time to time, the plans are sure to require modification but however tentative they may be, they should be developed. An unchartered course leads nowhere.

The foundation of a rational program is clear definition of field and scope. Its importance cannot be overemphasized. From this footing plans should be built along lines which museum experience has shown to be sound. Succeeding chapters bear upon the various factors that are involved.

It is highly desirable that the work of every museum be adapted to local conditions—the character of the region and of its people. Local occupations, organizations and interests, attitudes of public leaders, aims of school authorities—all such elements deserve study to the end of finding guidance in mapping field and scope and projecting educational work. A discussion of the process of adapting library work to a community, which is suggestive of methods for solving analogous museum problems, is to be found in Part I of Wheeler's *The Library and the Community*.[1]

During the first year, a nucleus of collections should be formed and policies laid down to govern further acquisitions.

[1] Wheeler, Joseph L. The library and the community. Chicago, American Library Association, 1924, 417 pp.

Temporary exhibitions of borrowed objects are convenient to supplement the slender resources of exhibition material which are all that a museum is likely to have in its own possession for a time, and such exhibitions have the further advantage of making a showing while the problem of permanent exhibits is being studied.

Full recognition should be given from the start to the fact that museum work does not consist solely of making collections and providing for their exhibition. Museum *service* may be built up at the same time that collections are being developed. However modest the activities, it is important that a museum be identified in terms of them. There should be early provision for school service; it is better to serve only one classroom than not to make a beginning, since this work is very productive of public support. Other activities for children and educational work for adults should not be neglected. It is better to do a little work along each of several important lines than to mature one to the exclusion of others. Symmetrical development is healthy development.

The course by which administrative work is to be advanced also requires study. Ordinarily, a museum is not brought into being in response to popular demand. More often it is the creation of a few, and public recognition follows accomplishment. The first financial problems are usually solved by a group of supporters, each of whom pledges contributions for three or five years. A campaign for funds, which might be unsuccessful at the very outset, is in order when recognition has been won. Then also public support may be sought with confidence. Regular publicity is an important supplement to effective work. To supplement newspaper publicity, it may be found possible to start publication of a bulletin—if only a four-page one, appearing quarterly or at longer intervals.

Although some institutions acquire buildings at the

outset, many do not, and with these the tendency is strongly toward operating from temporary quarters for a time. However the building problem should not be neglected until it forces itself to hurried attention. Tentative plans are helpful in crystallizing ideas which in turn influence directions of growth. If ultimate requirements are predetermined, purchases—especially of equipment—may be made with reference to the future as well as immediate needs and each step may represent direct progress towards the goal.

It is important that no museum undertake to work in isolation at any period of its career. Cooperation with other museums in the same region is very important, but the fact that all museums throughout the country may be helpful to each other is not to be overlooked. A channel of contact with the movement as a whole is The American Association of Museums.

The purpose of these paragraphs, it will be observed, is not to lay down a course of development for all museums, but to suggest the vital need of studying each institution individually and of projecting its future. The leadership of a trained director is the best assurance of progress.

XXI

TEMPORARY QUARTERS

THE problem of building may advantageously be held under consideration until a museum has had time to explore its opportunities, to make constructive beginnings in various lines of work, and to establish itself somewhat in the public mind as an institution which deserves support. When these preliminary steps have been taken, housing requirements will have been determined quite definitely, and plans may be drafted to meet them. Also the cooperation of local officials may be enlisted more easily after an institution has become known than at the beginning of its career, and as a result the chances of persuading the local government to furnish land and a building—as shortly to be explained—are less remote.

During the initial period, temporary quarters may be secured, sometimes at little or no expense. Space in a public building, such as a county clerk's office, city hall, court house or school, may be available. In fact laws in some states require that accommodations be provided by local or county authorities, and as may be learned from Appendix D, occupancy of such quarters for a stated period may enable a museum to qualify for public support. Many museums locate in public library buildings. If the arrangement is temporary it may be excellent; if it is permanent, however, it is to be deprecated for reasons which have been mentioned and which will be fortified in subsequent chapters. A museum may advantageously begin its career in a library, but sooner or later it should remove or find itself evicted.

A residence is usually better than a public building for temporary use. If an old home is standing idle it may perhaps be leased at nominal rental. In one city such a property was transferred to a museum for a consideration of one dollar, with an agreement to reverse the transaction within ten years. In this way the owner was relieved temporarily of paying taxes, and the museum secured quarters without rent or taxes.

Occasionally a first home may be secured by taking advantage of the threatened destruction of some historic house. Public pride and generosity will rally to the preservation of a landmark, and in such a property a museum may find for itself temporary quarters and also an important permanent possession which in due course may be restored and preserved as a branch exhibit. Under favorable conditions the ultimate home of the museum might be developed in relation to an old one of this kind—as a setting for a gem.

TEMPORARY ALTERATIONS

A few alterations in almost any room will fit it after a fashion for exhibition purposes. However, as a preliminary, floors should be inspected to determine whether they are equal to the loads that are to be imposed.

Chandeliers should be taken down, and any elaborate ornaments removed or covered. If the lower sashes of windows can be boarded up without darkening a room unduly, the usual arrangement of high windows in museum exhibition rooms may be approximated. Walls may be covered with burlap or other fabric held by beading along top and bottom. If there is no objection to damaging wall surfaces, a coat of green or red stain may be put on the plaster or wall paper before the cloth is stretched over it. This gives a tone of excellent quality. Floors may be covered with a plain linoleum.

THE BROOKLYN CHILDREN'S MUSEUM, WHICH HAS ESTABLISHED ITSELF IN A RESIDENCE.

Cases and other equipment purchased for temporary quarters should be selected for their ultimate rather than their immediate use. If the future is studied carefully, a museum may have many items of equipment and exhibits ready to be installed in a permanent building when the time arrives.

THIRD PART

CURATORIAL WORK

XXII

ACCESSION POLICIES

Accession of objects for museum collections and exhibits should be regulated by staunch policies. To keep out material which does not contribute to established plans and to avoid serious limitation through conditions of gift are major problems for every museum, but they are doubly important to a small museum which may quickly be snowed under or easily rendered helpless.

On most occasions a discriminating director needs no more than sound policy to guide or support his judgment, but from time to time it is necessary to pass formally upon a case by calling the accession committee of the trustees into action. This course is usually prescribed if expenditure is involved. Museums of art purchase a majority of the objects which they acquire and therefore it is the regular practice for the committee to pass on accessions. Museums of science, and especially of history, acquire most of their collections through gift or field work, and there is so little for a committee to do that in most instances one does not exist. For a general museum the best practice seems to be that of requiring committee action only upon accessions by purchase and such others as the director may bring up for advice or assistance.

SOURCES OF MATERIAL

It should not be necessary for a small museum to make many purchases, but discriminating and judicious buying is desirable within limits. In small communities if

objects are acquired locally at a price, many gifts are forestalled. Important antiquarian material is to be found discarded in the attics of every town, and if a museum becomes established in the confidence of the people, heirlooms make their way to its collections in a steadily swelling stream. Archæological and ethnological objects are brought home by returning travellers and are gathered by local collectors who may ultimately seek a permanent repository for them. Beautiful, though perhaps not rare and costly, works of art are also frequently available and some may be secured by gift. Old masters are beyond the reach and also perhaps beyond the needs of most small museums, but good reproductions of them may be had. Science collections also gravitate to a museum, and local collecting activities which the museum itself may organize can be depended upon to yield series of plants, animals, fossils, rocks and minerals. If such sources of material are not neglected, purchasing—chiefly out of town—becomes a legitimate way to strengthen the collections at their weakest points.

Out of the many opportunities which every museum has of adding to its collections, choices should be made with greatest care. On occasions worthless material may be accepted and later thrown away rather than to give offense by refusing it. At other times persuasion may be used to hold a friend without accepting material that is not wanted. To keep some objects out is more important at times than to get others in. Interest and sentiment should not be blighted by "cast iron" methods, but the future of a museum should be safeguarded at all times.

Three duties devolve upon the director: first, to induce gifts by establishing confidence and good will, second, to refuse courageously but tactfully what would become a burden, and third, to avoid awkward conditions attached to gifts that are accepted.

CONDITIONS OF GIFT

Donors commonly seek to impose conditions upon museums either for the purpose of perpetuating their own names or out of sheer perversity. This desire is sometimes the result of a patronizing attitude of which a donor may be disabused if reminded that a museum performs a public service when it accepts objects and provides for their safety and best use. Explanation of issues involved is convincing to any reasonable person; the tendered gifts of others must often be declined.

In order to anticipate circumstances which are sure to arise, the trustees should lay down definite accession policies which the director may cite as authority. Staunch policies in such matters are as necessary as sound organization or regular income.

Policy should forbid the acceptance of a collection under condition that it be kept intact. An assemblage of miscellaneous material is a "white elephant" unless it can be assimilated into the existing collection. An accession made up of closely related objects is less troublesome to administer separately, but only the most homogeneous material such as an important systematic collection of a specialist is worth accepting to be kept intact. In any event, the general policy should be unequivocal, and exceptions—if any—made only by special action of the trustees.

Policy should forbid the acceptance of material under condition that it be exhibited permanently. The exhibits represent selections from the collections of a museum. Not all objects are suitable for exhibition and, of those that are, not all are appropriate for permanent display.

Desire for a memorial is the usual motive for conditioning that a gift be placed on exhibition, and usually it prompts the further request, in the case of a large gift,

that it be shown in a room named officially after the donor. This is undesirable from the standpoint of the museum, since it tends to feature personalities to the detriment of other purposes. The usual and proper way of giving credit is to affix the donor's name to the label of each presented object as a matter of recognition and of record. If material so labeled is dispersed, the name goes with each piece.

Policy should forbid acceptance of a gift under condition that the museum keep it permanently. It should be the right of a museum to make the best use of its collections. If an object becomes undesirable it should be eliminated, since to keep it would interfere with the care and use of more important things. A museum should be free to part with any of its possessions by gift, sale or exchange, in order to bring about readjustments under changing conditions or to remedy overcrowding. If this right is reserved, material may be accepted without fear that the future will give occasion for regret.

If an object received by gift is sold, the funds derived from the sale should be used to acquire other material to be credited to the original donor, and the same practice in the matter of credit should be followed in the case of an exchange. Objects acquired by purchase or collected in the field may be sold without restriction. Every sale should be specifically authorized by action of the trustees.

The question of selling works of art from loan exhibits, which is quite another matter, is taken up in the chapter on art collections and exhibits—page 165.

CONDITIONS OF LOAN

Since loans are accepted for immediate purposes—usually either exhibition or study—any arrangements which suit convenience are quite proper. The danger of mort-

gaging the future does not exist with loans as with gifts, since borrowed objects may be returned at any time. But even so, an undesirable loan should not be accepted to accommodate the owner, whoever he may be, and loans for storage should be considered only under the most unusual circumstances—if at all.

Some museums do not accept material on loan for a period shorter than a year, but any such general rule is likely to be disadvantageous. If a loan is to be put on exhibition at considerable expenditure of time or if withdrawal of it on short notice would cause inconvenience, then a long term should be required. Ordinarily, however, objects may be borrowed for days, weeks or months as circumstances dictate. Short-term loans yield many temporary exhibitions.

WRITTEN AGREEMENTS

It is a safe precaution against misunderstanding to have a written agreement covering each important gift and each loan. A possible phrasing for an agreement of gift is the following:

CONTRACT OF GIFT

> I hereby give and donate without limiting conditions to _____ the following articles to be the absolute property of the Museum.

The same ground is sometimes thought to be covered by a letter of acceptance, but this may not be acknowledged and therefore is of no assured value.

Loan agreements usually follow the lines of the subjoined example.

CONTRACT OF DEPOSIT

I hereby deposit in the custody of_____ the following articles:

It is understood that the conditions of this deposit are as follows:

The articles remain the property of the depositor and are subject to withdrawal by him at any time, except as hereinafter provided.

These articles will be delivered upon the surrender of this receipt or a written order of the lender or his duly authorized agent or legal representative. In case of the death of the lender, the legal representative of the deceased is requested to notify the Director of the Museum forthwith giving full name and address in writing.

The Museum will give to these articles while in its custody the same care they would receive if they were its property, but it assumes no responsibility in case of loss or damage by theft, fire or otherwise.

Should the Museum at any time desire to terminate its obligations with reference to these articles or any of them, the owner may be notified that they must be withdrawn within thirty days, and if not so withdrawn they shall then become the absolute property of the Museum.

Permission to copy or photograph works of art which are lent to the Museum is granted only after consent has been obtained from the owners.

(Signed) _____

(Address) _____

_____

Received

_____

By _____

XXIII

THE STUDY COLLECTIONS

A MUSEUM should not have all of its material on exhibition, and furthermore it should not have all the excess packed away in storage. If collections are divided between exhibition cases and the cellar, the cases are sure to become jammed with things that are too important to be kept in packing boxes, and the cellar is equally certain to acquire an accumulation that, to all intents and purposes, is lost forever. In a well managed museum a greater part of the material is kept available for use. The objects are classified and put away compactly in trays and on shelves where they are safe from damage, and the arrangement of them is such that any can be produced on short notice for inspection and perhaps for exhibition or other use. The collections which a museum disposes in this fashion may be used by students and therefore they are called *study collections*. These collections constitute a reservoir from which material is drawn for the exhibits; they contain materials of research; they are the source of some of the objects used for educational work. Many things selected for exhibition may be shown only temporarily and then returned to their places in the study collections.

A director may be heard to complain that his rooms are overcrowded with exhibition cases, each full to overflowing, and that he has no room for a study collection. This is to be expected where everything is kept in cases. If a person who has this difficulty would begin by organizing *everything* into study collections, he would find it occupying only a small part of the space required previ-

ously. The liberated floor area would then be adequate to make a good exhibit of selected objects.

DEPARTMENTS OF THE COLLECTIONS

The branches of the field which a museum covers naturally determine the main divisions of the study collection, each division of which may be in charge of a department. In a general museum devoted to history, art and science, three departments for these three subjects are usually the minimum requirement. If work is well developed, subdivisions may be required along lines which would constitute main divisions in a museum of more restricted field.

Some departments may not become active until others are well developed, but even in that event it may be desired to form the nucleus of a collection for the projected departments. If this is done, the material making up each nucleus may be recorded and perhaps placed in storage; it should not be mixed with the collections of active departments.

There are objects which might be assigned to either of two or three departments depending upon the interpretation placed upon them. For example, a piece of primitive pottery which is chiefly of historical or archæological interest may also be a work of art. A passenger pigeon which belongs in the collection of birds may also be of historical importance. Numberless such examples might be cited. However, there should not be great difficulty in determining what assignment to give any object for purposes of recording it and placing it in the collection. The question is always one of relative values. It would not be appropriate for instance to treat local birds as historical material because they exemplify the vanishing fauna which our descendants will want to know about in order to visualize our present-day lives. The extinc-

tion of species is primarily biological and not historical, and yet some museums of history collect fossils without realizing that these are objects of science requiring scientific interpretation to be significant. Similarly, some art museums enter the field of history by collecting ethnological material regardless of its artistic merit.

The fact that an object is assigned to the study collection of one department does not prevent its use by another department for exhibition or other purposes. An exhibit of pottery, for example, might draw upon history for various types of primitive pottery, upon art for pieces of good design and upon science for samples of materials. Sometimes it is found desirable to transfer material from one department to another, as conditions change. This can be accomplished without difficulty if records are kept as recommended in a subsequent chapter —page 173.

SCOPE OF COLLECTIONS

Every small museum has a field that absorbs, or might absorb, the full attention of a large museum, and further, every small *general* museum attempts to cover ground to which in large cities three or more large museums are devoted. It would seem, therefore, that no growing museum could long remain small. But a small community cannot support a large museum, and, in consequence, to be successful the small museum must find a way to limit its physical growth without retarding its development in usefulness.

So far as study collections are concerned, control of bulk is dependent upon limitation of scope, or comprehensiveness. Definite policy in this respect is imperative. In general, the study collection in each field should be developed along the lines of an appropriate specialty.

Specifically, this problem is considered in three subsequent chapters devoted in turn to the study collections and exhibits of history, art and science. There is no museum so circumscribed in field that it lacks occasion to form a study collection.

XXIV

THE EXHIBITS

According to the best museum practice, exhibits have a direct relation to study collections in that they are made up of objects selected from the collections and, for the most part, capable of being returned at will. Some museums actually reserve the places in the storage racks from which things are taken for the installations, so that exhibits can be made and unmade with entire freedom. Of course, such flexibility is not attainable in the case of objects which, in being prepared for exhibition, are rendered unsuitable for return to the study series, or of models and groups which may be useless except as exhibits, or of massive pieces which must be kept on exhibition if they are to be kept at all. Such things give a certain detachment to exhibits, but in general, material on display is conceived to be an integral part of study collections, chosen for some definite reason and placed on view for a longer or shorter period.

Observance of this principle tends to give high character to exhibits, since it emphasizes the importance of *selection* of material for them, and incidentally it helps to overcome the annoyance which some donors feel if their gifts are not put on exhibition. Any such fancied grievance is an aftermath of the once common practice of exhibiting everything. It is based upon a belief that only rejected objects are put out of sight—an idea which any museum should be able to disprove.

A further advantage of recognizing in practice the relation which should exist between study collections and exhibits, is the effect of drawing attention to the impor-

tance of collections. This tends to bring about development of facilities for research and educational work.

SHOWING NEW ACQUISITIONS

Partly as an unction to donors and partly as a real offering to the public, important new acquisitions may be placed on display temporarily in a special case for *Recent Gifts*. After this initial showing some objects need never be exhibited again.

Ingenuity will suggest methods of dealing with new collections that are too bulky to be installed in the recent-gifts case. They may be placed on temporary exhibition elsewhere in the museum or arranged for inspection in the study collections, with only a few objects installed in the case and so labeled as to indicate the extent of the material and where it may be seen.

PURPOSES OF EXHIBITS

Museum exhibits which have a dignified purpose may —in fact, *should*—also be interesting and attractive. There is no basis for the notion that the public must be shown the startling or the grotesque to attract its attention. Museums are not concerned except perhaps incidentally with the unusual or the spectacular.

Objects of history stimulate the imagination and, if intelligibly presented, they enable one to reconstruct the past. Specimens of science appeal to the intellect and, if plainly interpreted, they impart understanding of the world of nature. Works of art address themselves to the sense of beauty and, if tastefully shown, they give pleasure. To achieve one of these results is the usual purpose of an exhibit; to achieve more than one of them is sometimes the aim, as remains to be seen.

The success of an exhibit depends largely upon the skill employed in its installation. To install an object properly may be only to show it pleasingly, or it may be to show it pleasingly and also to explain it. This depends upon the character of the object and the purpose for which it is displayed. Since works of art are created to make their own appeal, they require favorable setting rather than labeling or other fact-stating devices to induce appreciation of them, but if the desire is to bring out facts about the character or history of art objects, expository methods are in order. On the other hand, objects of history and science usually require explanation. Exposition of an exhibit must not be confused with mere identification of the objects which compose it. A striking demonstration of the difference between these two possibilities is offered by comparison of the explanatory remarks of an untrained museum guide with those of a skilled instructor. The guide only tells what objects are and he leaves his hearers with confused memories. The instructor points out objects to assist him in conveying thoughts and he leaves his hearers with ideas.

These subjects are discussed further in the chapters on installation of exhibits and labeling—pages 209 and 223.

PERMANENT AND TEMPORARY EXHIBITS

Some exhibits may be permanent by reason of their immobility, and others because of their fundamental character or great importance. Such fixed exhibits may be supplemented by temporary ones.

Permanent exhibits serve as the background for regular educational work and necessarily therefore they should be general in character and should touch upon all the main branches of a museum's field—limitations of space being reflected by sketchiness of treatment. Tem-

porary exhibits tend to be more intensive; usually they cover a limited subject rather fully.

Changing exhibits give freshness and this is especially important to a small museum which visitors may feel they have "seen" in one visit. Also they carry emphasis by reason of the interest which attaches to any special feature, and the understanding which comes of concentration upon a few things at a time. If provision is made for such exhibits, either by reserving space or by arranging so that room may be made available, there should be no great difficulty in providing for frequent temporary installations. Elaborate exhibits may be kept on view for months; simple or especially timely ones are shown ordinarily for a few weeks only. The material for such exhibits may be drawn from the study collections or borrowed. Occasionally for short periods important objects may be attracted from homes or even stores, and, in the field of art, traveling exhibits supply many needs.

There is ample opportunity for museums to cooperate in the preparation of temporary exhibits. If several institutions with about the same needs would each agree to prepare one exhibit a year and to exchange among themselves, all of them might have ever-changing installations in return for slight expenditure of time and money. This is the only way in which a museum can be sure of an uninterrupted sequence of exhibits, and, if it is carried out in the light of an agreement upon specifications, it solves difficulties attendant upon installing a succession of exhibits of unlike size and type.

ARRANGEMENT OF EXHIBITS

Usually exhibits are separated into the same main divisions as study collections. Within any section, there are two bases upon which they may be arranged: that of class-

ification by kind, and that of association by use. For example, in an American history section, household implements may be classified and all the lamps put together to show the development of lighting, or implements may be associated according to the time and place of their use so that the paraphernalia of a colonial kitchen is brought together. So also in an art exhibit, all paintings may be shown together, or they may be placed with other kinds of objects grouped by period. In a science installation, animals may be classed in families or arranged so that different modes of life are illustrated.

Both types of arrangement are so necessary to presentation of any subject that they are usually employed side by side, in permanent as well as in temporary exhibits. The method of arranging by association leads directly to the two special types of displays known as the *period room* and the *group*. Succeeding chapters deal specifically with these various subjects.

EXTRA-MURAL EXHIBITS

Branch exhibits are arranged by many museums. Public buildings, schools, store windows and other favorable locations may be used to make installations which are of value in themselves and also are useful to the museum, since they act as leaders to its exhibition rooms. Such extensions of influence are characteristic of progressive museums.

XXV

OUTDOOR EXHIBITS

Museums have always placed emphasis upon collecting —the process of bringing within four walls examples of what is to be found throughout the length and breadth of the world. Recently, however, much attention has been given to an idea which is the very converse of the one that underlies collecting. That is the notion that things in their natural outdoor settings are exhibits which can be used for museum purposes without being "collected."

Outdoor museums are not new, to be sure. There have long been such as the famous one at Skansen, but for the most part these exhibits have been installed outdoors specifically for museum purposes, rather than utilized wherever chance has provided them. The new idea is that outdoor exhibits need not be created—that they exist and need only to be utilized. On the basis of this principle every museum may to some degree become an outdoor museum by interpreting in the out-of-doors the works of nature and the products of man's handiwork. This function will probably never so eclipse the indoor exhibition work of museums as to produce institutions of entirely new type, but undoubtedly as a supplement to indoor exhibition, extra-mural activity will play an increasingly important part.

In the field of science there is a special wealth of material. Local, county and state parks and the whole countryside offer successions of exhibits. Geologic features of the landscape, rocks, birds, insects and plants may be seen on every hand, but they are not recognized or understood by most people. It remains for museums to inter-

BRITTON COTTAGE—A 17TH CENTURY HOME MAINTAINED BY THE STATEN ISLAND INSTITUTE OF ARTS AND SCIENCES.

pret them to the layman. The means by which this is to be accomplished are not fully defined, but experiments in progress range from tree-labeling in cities to the establishment of small *trailside* museums in national parks—each to expound some natural feature at the spot where nature has placed it on exhibition.

An experiment which is especially suggestive for small museums is that described in Lutz's *Nature trails.* It consists in maintaining a woodland trail along which trees, shrubs and herbs, rocks and other natural objects are labeled with tags. The upkeep of such a trail is an appropriate project for a group of boy scouts, and experience has shown that appeal in the labels for care forestalls practically all vandalism. Training the public to take care of the out-of-doors is considered to be one of the most important features of the undertaking. Development of this plan at summer camps, in connection with small temporary collections, is another possibility which has had rewarding attention under museum leadership at Bear Mountain, New York, in the Palisades Interstate Park.

In the field of history also, museums have ample opportunities out-of-doors. Although much has already been done in this direction by marking sites, there seems to be need of a new technique—such as can come only from concerted efforts to present the full story of local history in terms of outdoor exhibits.

Many old buildings of vast interest house small museums. This is unfortunate wherever the occupancy results in permanent conversion of a historic place into a series of exhibition rooms for display of unrelated material. An old and historic house invites installation of household objects of the period in realistic arrangement. Such a place is in spirit a single exhibit, not the home of a museum. Perhaps some of the old houses which are now

filled with exhibition cases may come to be regarded as temporary quarters, for conversion at some future time into branch exhibits of history—extra-mural installations, half indoors and half out.

In the field of art also there is opportunity to apply the new thought. Architecture has always been a stumbling block which museums have gotten over with difficulty by exhibiting small models and photographs, but if the out-of-doors is to be a museum precinct, the originals automatically become museum pieces. There is needed only a technique of relating them to indoor exhibits and of basing educational work upon them. Some of the finest sculptures too are in public places and need only the efforts of museums to draw public appreciation. The problem here is comparable in a way to that of treating geology, which hitherto has been represented in museums by models, photographs and rock-fragments.

In foregoing paragraphs, suggestions as to method have necessarily been meager; this branch of work is as new as it is vital. Efforts will doubtless first be made to interpret outdoor exhibits that are near at hand to each museum, but already it is being suggested that some of the opportunities lie far afield. Members of every community are going and coming by train and automobile, and therefore it is well within the province of any museum to interest itself in teaching through the agency of museum-inspired road maps and railroad leaflets which interpret what one sees along the way. Railroad station exhibits to quicken interest in such leaflets and to prepare the mind for an intelligent journey have also been proposed.

When the full gamut of possibilities shall have been visioned and some of them put into practice, museums may become the leaders in a new conservation movement that will carry an appeal to every citizen. Then the museum

will really take the world to itself and will be "the refuge, not the home, of the objects . . . it shelters."

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BUMPUS, HERMON C. Relations of museums to the out-of-doors. Publications Amer. Ass'n. Museums, N. S. No. 1, 1926, 7–15.

GILMAN, BENJAMIN IVES. Museums of art and the conservation of monuments. Proc. Amer. Ass'n. Museums, 1909, 3: 87–92.

LUTZ, FRANK E. Nature trails. An experiment in outdoor education. American Museum of Natural History. Misc. Pub. No. 21, 1926, 36 pp.

XXVI

THE LENDING COLLECTION

Some museums do not allow objects to go out on loan under any circumstances, because they feel the weight of responsibility for things in their keeping and are not prepared to take any risk of damage or loss. In consequence they are prevented from rendering a useful service. The seeming impasse is created by failure to differentiate between two kinds of material that every museum possesses. There are some objects which are important in themselves because of their associations, their rarity or their intrinsic beauty or worth. An object that has played a unique part in history, a scientific type-specimen or an original and fine painting are examples. Such things are not replaceable and should of course receive care that will assure their safety. On the other hand, there are other things which are not individually important or unique, but which, as examples, may be used for teaching purposes. Of this sort are many archæological, ethnological and historical objects, rocks and minerals, plants and small animals, inexpensive objects of art, such as certain prints, ceramics and fragments of textiles, as well as reproductions of art works of all kinds. Such objects may be used to form a lending collection.

The chief occasion for existence of the lending collection is school-service, and therefore the collection should be developed with special reference to the school curriculum. The textbooks in use should be read, teachers and principals consulted, and every effort made to provide material that can be used. The kinds of objects that are most in demand may be learned by consulting the cata-

logs indicated in the appended list of references—one of a large, one of a medium-sized, and one of a small museum respectively.

The three usual classes of material are objects, pictures and lantern slides.

OBJECTS

The most fruitful source of objects for a lending collection is the average study collection. Most long series of study material may be cut down without doing violence to their usefulness, and to the fragmentary assemblage thus developed by appropriation of surplus may be added some material secured especially for lending. A little effort put into collecting local rocks, minerals, plants and animals should yield a fairly representative collection. Announcement of needs in the press may be counted upon to draw history material of the sort needed for school use. Art materials, such as inexpensive or fragmentary original objects, and many reproductions are obtainable by gift or purchase.

To illustrate certain lessons, sets of objects may be assembled, but large sets are not desirable because they divide the attention of a class too greatly. A dozen or fifteen objects are usually enough. Each set should have its own brief descriptive matter, and objects may be supplemented by pictures, lantern slides and even books for supplementary reading.

Only such objects as require protection should be put under glass or in containers of any sort. The usefulness of the lending collection depends upon opportunity to handle objects quite as much as to see them. However, some things must be guarded against rough usage, and among them are mounted birds. The severe damage which they commonly sustain has led to discussion of the

wisdom of including birds in the lending series. However, a device that has recently been described in print, seems to solve the problem. It requires the use of bird skins instead of fully mounted birds—each skin being provided with a handle in the form of a stick that is fastened into the skull, passes back through the skin and sticks out well beyond the tail. The feet of the bird are tied firmly to the stick near its middle. This device, of which a description was published by Joseph Grinnell,[1] has been improved by encasing the object in a celluloid container as explained in an article by William S. Wright.[2]

For a small or flat object that requires protection, an improvised butterfly mount may be made out of a cardboard box by removing a rectangular piece from its lid, leaving only a narrow margin. A glass top is fitted inside the frame-like cover and the box is filled with cotton to hold the object in place against the glass.

PICTURES AND SLIDES

In order to fill gaps and to extend the scope of the lending collection, it is customary to include pictures. Useful pictures covering a wide range of subjects may be obtained from magazines, books, albums, posters and other sources at little or no cost. They may be mounted on cards of uniform size—conveniently 13 by 17½ inches—in order to facilitate filing and handling.

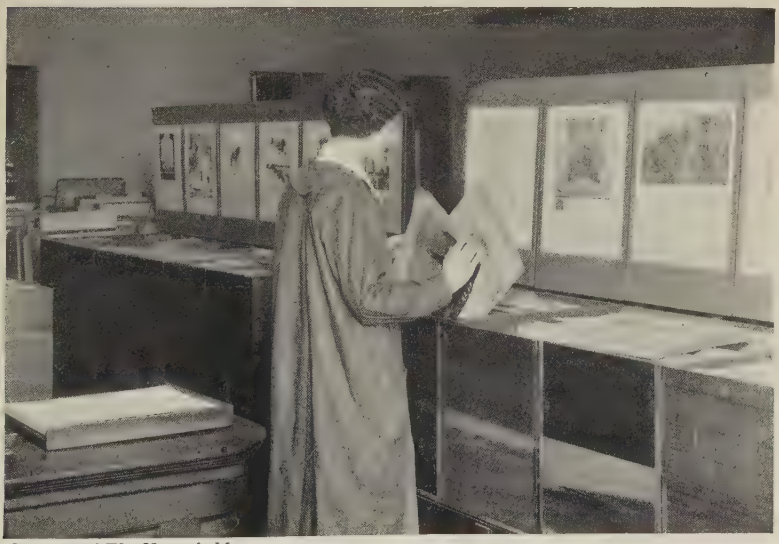
There need be no confusion between the photographs and prints which form part of the art study collection, on the one hand, and the pictures in the lending collection, on the other. The former are selected reproductions of masterpieces together with etchings, lithographs and other original prints. The latter are pictures of all kinds—

[1] The Condor, May 1924, 26: 107–108.

[2] Publications Amer. Ass'n. Museums, N. S. No. 3, 1927, 14–16.

Courtesy of Erie Public Museum.

A.—LENDING SET FOR CLASSROOM USE ILLUSTRATING THE HISTORY OF PAPER.



Courtesy of The Newark Museum.

B.—FILE OF PICTURES IN A LENDING COLLECTION.

many of them chosen for their subjects without regard to any artistic value which they may possess.

Lantern slides, which form the third class of lending material, are quite expensive but they are so useful to the schools that a small collection may well be formed. Every slide should have its brief descriptive label, but this rarely gives enough data for all purposes. In response to the need for more information, as well as to stimulate use of the slides, it is customary to prepare descriptive lectures relating to sets of about fifty slides. These so-called *canned lectures* may be typewritten or mimeographed for circulation, and should be protected by cardboard binders.

Sometimes it is maintained that *sets* of slides are undesirable because they relieve teachers of the necessity of doing their own thinking. This is a specious argument. Teachers with initiative never fail to be original; others cannot be induced to think for themselves and will not use museum material at all if it lays a tax upon their powers. However, sets need not always be kept intact unless the demand for them is considerable—in which event duplicate slides may be made for the purpose so that one copy of each slide may be available for lending individually. To facilitate checking up the number and arrangement of slides in a set, a diagonal line may be drawn across the top of the set from corner to corner. This line crosses each slide-top at a different distance from the edge, and a missing or misplaced slide may be detected at once by a break in the line. Paint or colored pencil may be used to make the line, but the mark on each slide may be made more permanent by pasting a narrow strip of colored paper over it.

Every museum may find subjects for some slides in its own collections and exhibits. The resources of dealers may be drawn upon also, if means permit. Many of the

larger museums are willing to make slides from their own negatives at cost.

Motion picture films are lent by some institutions. One museum lends projection lanterns as well as slides, so that anyone may conduct a travelogue in his home. Another museum lends paintings. However, such services as these make rather severe demands upon the treasury, and most small museums cannot offer them.

FILING AND CLASSIFICATION

Objects, pictures and lantern slides should be kept in independent series, but the basis of arrangement should be the same for each. A subject classification which recognizes subjects included in the school curriculum is advantageous for teachers, and it is as good as any other for the general user. The following main headings are taken from the catalog of the Newark Museum.

Industrial processes—divided by product or process: asbestos, bookbinding, etc.
Economic products—divided by product: bamboo, barley, etc.
Minerals—divided by name: agate, alabaster, etc.
Physical geography—divided by subject of model or picture.
Nature study:
  Insects
    Life histories—divided by *popular* name of insect.
  Butterflies
  Moths
  Marine life, amphibians, reptiles, crustaceans—
  Birds
    Birds' nests

Mammals
Woods
Textiles—divided by material: cotton, flax; and process; Jacquard loom, spinning-wheel, etc.
Dolls in costume—divided geographically.
Life and customs—divided geographically under subheads: general, races, weapons, toys, etc.

The file of mounted pictures may be made to serve as the nucleus of an index to objects in the lending collection by inserting at proper points cards of the same size as the picture-mounts and bearing references to objects in the collection. For convenience, photographs or outline sketches of the more important objects may be affixed to the cards. If this plan is carried out, the user has only to leaf over the cards in order to determine the resources of the lending collections in either pictures or objects.

A typewritten, mimeographed or printed catalog of the lending collection adds greatly to its use. Items should be arranged in the same manner as the contents of the collection and numbers may be assigned to facilitate ordering. A decimal notation is best for this purpose since it admits of indefinite expansion.

MANAGEMENT

The routine of lending material and making records of its departure and return is very comparable to the mechanical part of library work. For this reason it may be advantageous for the lending collection to be administered by the librarian of a museum.

School teachers usually form a majority of those who use the lending collection. Whether or not others should be required to join the museum in order to have the borrowers' privilege, is a matter of opinion, but in any event

credentials should be required. Those who borrow are serious-minded people engaged in all sorts of undertakings. One is designing a costume; another is preparing a paper for a meeting; a third is getting up a pageant. They are all potential museum members.

Lending material needs to be protected for transportation. Wooden carrying cases of appropriate uniform sizes with hinged lids and metal handles can be made by boys in public school manual training classes, and some museums have been able to get numbers of boxes made in this way by paying only the cost of materials.

REFERENCES—

The following catalogs describe three lending collections of different size:

Catalogue. Educational Museum of the St. Louis Public Schools, 175 pp.

Educational material for teachers. Newark Museum Association, 1923, 20 pp.

Lending Collections. New Jersey State Museum, 1922–1923, 19 pp.

See also:

Dana, J. C., and Gardner, Blanche. Aids in high-school teaching: pictures and objects. Vol. 2, pt. 19 of: Modern American library economy as illustrated by the Newark, N. J., Free Public Library. Woodstock, Vermont, The Elm Tree Press, 1916, 68 pp.

XXVII

HISTORY COLLECTIONS AND EXHIBITS

In applying to the materials of history the principles which should govern the development of study collections and exhibits, questions of geographic range and time range must be taken into account. Each museum must decide how much of the world it will consider and how far it will delve into the past. In other words it must determine the extent to which local history and recent years are to overshadow world background and remote ages. In doing so it should be guided by three facts. First, physical and financial limitations circumscribe the possibilities. Second, a study collection is useful to scholars only if it develops a specialty. Third, exhibits are most useful for educational work if they are general in scope.

History deals with the whole of man's career—not just with events in war and politics. This interpretation of the field is not peculiar to museums; it expresses a view that is quite generally accepted. "Today, historians conceive of history as the evolution of the human race during 250,000 years—as everything that man has done, said, felt and been. It includes the unrecorded as well as the recorded life of man, and denies the existence of a prehistoric period. In space it embraces the whole earth."[1]

In consequence of this understanding of their field, museums of history are concerned with archæology and ethnology. The materials of these subjects may be arranged "to show the every-day life and culture of the people—their implements of hunting and warfare, their

[1] Flick. See reference on page 160.

means of shelter, their articles of clothing and utensils for cooking, and their objects connected with cult or worship; their skill as craftsmen, whether in flint and stone, in pottery, in weaving, or in copper and other metals; their advancement in agriculture, transportation, trade or architecture; their use of symbolism and ornament and their sense of beauty. By these means attention is turned from the masses of individual detached objects to the people who made and used them. Thus in the Americas we become less interested in arrowheads and more in Indians, moundbuilders, cliff dwellers, eskimos, Aztecs, Mayas and Incas."[1]

The museum of history at its best, therefore, is what might be called a museum of culture-history, or of culture. "Some educator has said that the most important discovery of modern times is the discovery of man, not primitive man, but man—man's discovery of himself. . . . This 'discovery of man' has changed the modern museum from a repository of dead material into a living and active force for the interpretation of man, and the museum which interprets man to himself is the culture museum."[2]

In covering this wide field, museums are prone to neglect the contemporary element. History did not end fifty years ago, yet current history seldom finds a place in a museum, for the reason, perhaps, that the wealth of present day material is overwhelming. This is unfortunate; it is the duty of a museum to give attention to the manner of American life today. It is especially important to watch for signs of changing times. Just recently the saloon departed and now the erstwhile barbershop and drugstore are preparing to leave our midst forever.

[1] Putnam, E. K., Museums passive and active. See references on page 245.

[2] Bragg, Laura M. Culture museums and the use of culture material. See reference on page 160.

Such facts should be noted and material with data should be added to museum collections while there is still time.

Industry is a part of contemporary culture, which, though sometimes overlooked, is intimately related to the various primitive occupations commonly represented in museums of history. The spinning wheel is grandfather to the spinning frame, the candle to the incandescent lamp. However, if treated from the standpoint of technical principles and processes, rather than of human behavior, industry is a special subject that is hardly within the field of a small museum—unless it be a special museum of industry.

"RELICS"

Many museums suffer as a result of the common belief that to be of historic interest and value an object must have been used by or otherwise associated with a celebrity or have played a part in some notable event. This is a misapprehension. A towel on which George Washington dried his hands is probably a good towel of its time. Its chief historic value arises from its character, and not from the fact that it was used by the first President. As a towel it is an object of history, but as a souvenir of Washington it is a so-called "relic."

Relics are fetishes, and so blind is the worship of them that the very word *relic* has fallen into disrepute among museum workers. Most of such objects are set up as targets for stupid staring and idle sentimentality. However, it must be added that some relics are essentially biographical material, and it would be wrong to underestimate their importance. Washington's coat expresses the man. Its value is not just that of chance association. The coat is a record; it is a muniment of history.

Any museum may gain by eliminating the more insig-

nificant relics, calling the rest *objects* and keeping in mind that history is represented largely by humble objects of daily use.

HISTORY STUDY COLLECTION

Whatever field is covered in a study collection must be covered with some thoroughness in order that the collection be worthy of its name and adequate to its purpose. Therefore the history collection of a small museum must develop a specialty. Local history is the logical specialty, and it may be represented quite fully in the study collection of even a very small museum.

There are two parts to the history of any locality in this country: that of the aborigines and that of the white man. These two stories are essentially separate, though they run together for a time. The former subject may be developed in terms of the succession of cultures that have occupied the local area; it includes some of archæology and some of ethnology. The history of the white man locally is the history of the community or perhaps of the county. Every museum of America might profitably preserve records of the same national story since emphasis is bound to be different in each community, and striking individualities are sure to be brought out in each section of the country. Thus it is only natural that at present the historical collections in New England emphasize colonial history and the Revolutionary period, those in the South are devoted largely to the time of the Civil War and those in the West have a preponderance of pioneer material.

As will be indicated shortly, the *exhibits* require a modicum of world material. Only the study collection is referred to in the foregoing comments on local history. However, it should be observed that even a local specialty

may lead into a little of world history. The story of a whaling town, for example, would naturally touch upon remote parts of the earth with which the town once had certain close relations through the voyages of the early settlers.

CLASSIFICATION OF STUDY COLLECTIONS

There is no accepted system of classification for the materials of history; in fact, the problem seems to have had very little study. Therefore, the following outline is offered with hesitancy, and only in the hope that it may be suggestive.

HISTORY OF THE ABORIGINES[1]

The materials of each culture should be kept separate.

I. General
   1. Systems of reckoning
   2. Records & documents

II. Material culture
   1. Foods
      - Ethno-zoology
      - Ethno-botany
      - Preparation of foods
      - Stimulants & narcotics
      - Medicines & surgery
   2. Personal adornment
      - Clothing
      - Hairdressing
      - Painting & feature ornaments

[1] This scheme is adapted from an unpublished classification for the literature of anthropology which is in preparation by the National Research Council, Washington, D. C.

- Jewelry
- Tattooing & other permanent decorations

3. Shelters & public works
   - Dwellings
   - Occupational structures
   - Ceremonial & governmental buildings
   - Interior furniture & utensils
   - Miscellaneous—middens, gardens, earthworks, etc.
4. Industrial arts
   - Sculptural arts
   - Plastic arts
   - Textile arts
   - Metallurgic arts
   - Graphic arts
   - Applied decorations
   - Stone objects
   - Transportation

III. Social life

1. Organization & government
   - Social unit
   - Totemism
   - Kinship
   - Property & rank
   - Descent & inheritance
   - Forms of greeting
   - Governmental officials & bodies
   - Law & order
2. Warfare and military organization
   - Methods of warfare
   - Organization
   - Maintenance

Insignia
Arms & armor

3. Individual life
   - Birth customs & taboos
   - Child life
   - Adolescence
   - Marriage & position of woman
   - Death & mortuary customs
4. Games & pastimes
5. Music, poetry & drama

IV. Religion
1. Concepts
2. Creeds & cults
3. Practices
   - Communal
   - Individual
   - Magic
4. Religious representatives

V. Mythology

American History

The headings are comparable to those for history of the aborigines; the histories of all cultures run in the same grooves, although the customary emphasis upon personalities and events of recorded history tends to obscure this fact. Full provision may be made in the following outline for the personal and specific by dividing or subdividing any topic chronologically. The following periods are suggested:[1]

French period
English period

[1] These divisions are taken from Flick. See references on page 160.

Revolutionary period
Territorial period
Period of statehood

Headings are not divided because details should be carried out in relation to material at hand. A classification full enough to cover all the possibilities would be overwhelming. Many of the noted subjects can be represented in museums only by pictures.

I. Material culture

1. Foods
2. Clothing & personal adornment
3. Buildings & public works
4. Furniture & interior decoration
5. Domestic implements & utensils
6. Agriculture
7. Sanitation, medicine & surgery
8. Engineering & transportation
9. Industry
10. Commerce
11. Money & banking

II. Social life

1. Customs & social structure
2. Organizations
3. Government
4. Education
5. Warfare & military organization
6. Individual life
7. Recreation
8. Music, poetry & drama

III. Religion & church

IV. Biography

To illustrate use of the foregoing classification, the following allocations are instanced:

Army uniforms	II, 5 *Warfare*—under the period of the war in which they were used.
Coins	I, 11 *Money & banking*
Fur trader's outfit	I, 10 *Commerce*—under division for fur trade and period subdivision
Lincolniana	IV *Biography*
Pictures	Classed by their subjects; portraits under *Biography*
Stamps	II, 3 *Government*—under division for postal service

The outline is a mere skeleton. As it is developed with use, a chart of subdivisions should be made and a subject-index kept to show assignment given to each class of material that is worked into the collection. In this way inconsistencies may be avoided. In arranging the collection it may not be found practicable to have the various groups of material follow each other in the appointed order.

History of Other Cultures

Most small museums are not in a position to have the following subjects represented in study collections—the local specialty in itself being almost too much to encompass. However, the headings are added to complete a scheme which, as remains to be indicated, may very possibly be sketched in the exhibits.

I. Prehistoric man in the old world[1]
   1. Forerunners of man
      Pithecanthropus
   2. Eolithic age
      Heidelberg man
      Piltdown man
   3. Paleolithic age
      Neanderthal man
      Grimaldi man
      Cro Magnon man
   4. Neolithic age
      Lake dwellers
   5. Bronze age
   6. Iron age

II. Ancient civilizations
   1. Egypt
   2. Tigris-Euphrates
   3. Other western cultures
   4. Asiatic cultures
   5. Aegean culture
   6. Greece
   7. Rome
   8. Europe

III. Contemporary cultures divided geographically

PERMANENT HISTORY EXHIBITS

In order to be most useful as the basis of educational work, permanent exhibits must be general in character. It is not enough to present local history or even American history; effort should be made to give a background of

[1] These divisions are also taken from the classification of the National Research Council.

world history against which to set temporary exhibits of local history. This is a task which may be carried as far as space and money will permit, but since small museums are limited in both these respects, only high points can be touched upon.

Perforce, the purpose of the exhibits is not to tell the whole story but to suggest it. Everything must be presented synoptically. This calls for a keen sense of proportion. The treatment might begin with the rise of man as made known by fossils and the oldest artifacts; it might indicate the successive stages of civilization; it might touch upon European history; finally it should outline American history with special reference to the course which it has taken locally. In other exhibits might be shown a few of the cultures which exist side by side with our own in the world today to suggest the other human currents that have run for ages. Part of this story is the local chapter of aboriginal history with its archæological background.

In order to carry out this plan it is essential that exhibition space be charted and subjects given room on the basis of importance. The relative amounts of material available for presentation of various subjects should be given little weight. Even though certain subjects cannot be dealt with at once, either through lack of material or uncertainty as to character of exhibits, each subject should be allowed its proper space. Then, until the needed objects have been acquired and detailed plans for the exhibits developed, some spaces may be used for temporary installations of one kind or another. Any other course than to *plan* for a symmetrical ultimate exhibit is bound to induce aimlessness.

In making these suggestions, it is not overlooked that in certain instances museums of history have been much criticized for giving prominence to ancient civilizations,

and it is not intended to suggest melanges in which special emphasis is lost. The thought is rather that in a small museum, the primary objective of permanent history exhibits should be to spread a broad background against which temporary exhibits of local material may be set.

In the light of the foregoing paragraphs, no comment need be offered upon a common practice—that of covering walls with portraits.

There are many books upon which to draw for information in planning exhibits. The following are noted:

For a survey beginning with the preparation of the earth for habitation and ending with the advent of civilization: Elliot, G. F. Scott. Prehistoric man and his story. Philadelphia, J. B. Lippincott, 1915, 398 pp.

For views of ancient civilizations of the Old World, from both the historical and the archæological angles: Myres, J. L. The dawn of history. New York, Henry Holt & Co., 1918, 256 pp. Also: Botsford, George Willis. A history of the ancient world. New York, The Macmillan Co., 1914, 588 pp.

For European history: Robinson, James Harvey. An introduction to the history of Western Europe. Boston, Ginn & Co., 1904, 2 vols. Also Readings in European history. Boston, Ginn & Co., 1904, 2 vols.

For American history: Muzzey, David Saville. An American history. Boston, Ginn & Co., 1920, 539 pp.

For an account of peoples in the world today: Keane, A. H. (Revised by A. Hingston Quiggin & A. C. Haddon.) Man, past and present. Cambridge, Univers-

ity Press, 1920, 582 pp. A fuller treatment of the same subject which is unequalled as a reference work is: Haddon, A. C. The races of man. New York, The Macmillan Co., 1925, 201 pp.

For a discussion of general principles which are shared by history, archæology and ethnology: Wissler, Clark. Man and culture. New York, Thomas Y. Crowell Co., 1923, 371 pp.

For a series of short sketches of cultures which are suggestive of exhibit outlines: Goldenweiser, Alexander A. Early civilizations. New York, Alfred A. Knopf, 1922. 428 pp.

TEMPORARY HISTORY EXHIBITS

Temporary exhibits offer opportunity to treat American history in detail, with attention to local phases and with emphasis upon personalities and events. These elements have been missed, no doubt, in perusal of the foregoing pages. To present even half a century of history in this way by means of *permanent* exhibits would be impossible except with ample resources of material and space, but by a succession of temporary displays the story may be taken up here and there at will, and in as much detail as opportunity permits. Material which can be secured will suggest subjects in succession, and many factors will determine the length of time for which each exhibit is to be on view. One may be shown for a year before another takes its place, but so long as each installation is conceived to be a chapter of a story which succeeding temporary exhibits will carry on as the years advance, then the rationale of the museum is preserved.

It is essential that a definite space be set aside for temporary exhibits. Changeable case-backs may be used

to facilitate the work of preparation, and simplicity of installation may be relied upon to solve many problems.

REFERENCES—

BELOTE, THEODORE T. The field of the historical museum. Museum Work, May–June 1925, 8: 9–16.

BRAGG, LAURA M. Culture museums and the use of culture material. Museum Work, Sept.–Oct. 1925, 8: 75–83.

FLICK, ALEXANDER. What should constitute a museum of history. Publications Amer. Ass'n. Museums, N. S. No. 1, 1926, 25–35.

PARKER, ARTHUR C. Unhistorical museums. Museum Work, Jan.–Feb. 1924, 6: 155–158.

XXVIII

ART COLLECTIONS AND EXHIBITS

THE arts are conceived by some to be architecture, sculpture and the graphic arts, namely, painting and drawing. To these major arts the term *fine* is commonly applied, as though works of fine art were superior to ceramics, metal work, carvings, tapestries and lace. In fact this view *is* sometimes encountered, but the tendency among art museums is to collect objects of beauty, whatever material or process they may represent. Also museums concern themselves increasingly with the art of today, relinquishing by degrees the idea that one must wait for time to prove qualities, and that, in consequence, museums are justified in acquiring only the old that has survived. Change of attitude on these two questions is partly responsible for the fact that museums now accept industrial art objects—things of utility, such as jewelry, glassware, china, silverware, furniture, wallpaper, textiles and costumes, into the making of which have been put efforts to create the beautiful. Many of such objects are made by machine, but if they have quality, they are ranked as museum pieces.

Inexpensive reproductions of many of the finest works of art are available. There are photographs and halftone prints of examples of architecture and sculpture as well as of paintings, drawings and objects of all the minor arts. There are many excellent color prints—of paintings chiefly. There are plaster casts of sculpture, replicas of bronzes and other metal work, and electrotype reproductions of Mycenæan, Cretan, Arretine, Roman and Merovingian antiquities. The best reproductions resemble the

originals very closely. In Appendix E is given a list of dealers from whom such objects may be obtained.

The usefulness of reproductions to museums has been questioned by those who maintain—and quite rightly—that only in the original can one find the full expression of the artist, or that photographs are relatively uninteresting to the public. However, the issue is not one of reproductions *versus* originals; it is more nearly one of reproductions *versus* nothing at all. Many objects which are not obtainable in the original may be had in reproduction, and many originals which are prohibitive in cost may be secured in good reproduction for a nominal price.

A museum has latitude in determining not only what kinds of material to acquire, but also what scope it is to have in regard to time and place. In other words, each museum must decide whether it will be concerned with periods and regions other than its own, and in doing so it should take account of at least two facts. First, such original art material as most small museums can acquire for their study collections is not of much real consequence, whereas only a few hundred dollars' worth of selected reproductions may be of great usefulness to students of art history. Second, by general agreement the educational features of art exhibits should be subordinated to the æsthetic. These facts point to reproductions as the nucleus of the study collection, and to originals, supplemented perhaps by the very best of reproductions, for exhibits. If these conclusions are adopted, questions of scope may be judged solely on the basis of available means.

ART STUDY COLLECTION

For reasons indicated, the art study collection of a small museum usually begins as an assemblage of reproductions. A series of perhaps five hundred photographs and prints,

representing the arts of all times, constitute a good nucleus to which additions can be made from year to year. The collection may be classified by the system used at The Metropolitan Museum of Art and published under the title: *Classification for photographs.*

Following the example of large museums, many small ones are not content with reproductions and attempt to build up reserve collections of paintings and sculpture. Results seldom justify the effort. If a museum has scant funds with which to make purchases, it must rely upon gifts. Most works that can be obtained in this way are of mediocre quality, and therefore are undesirable, but in order to make some headway, the museum lowers its standards and accepts works of little merit or such as are primarily of historic interest. Objects of the latter kind, such for example as most old portraits, war scenes and views of old New York, deserve to be preserved, but they should be relegated to a *history* collection. In view of these facts, an exception is made to the rule that a study collection should be formed partly to serve as a reservoir from which now and again exhibits may be drawn. If resources do permit of a serious attempt to develop a study collection of originals, the natural point of departure is the field of etchings, engravings, lithographs or other prints, since hundreds of dollars can do here what thousands do in other directions.

PERMANENT ART EXHIBITS

Many small museums with slender resources have no permanent exhibits, and many others which labor under space limitations have very modest exhibits which are put on display only between showings of temporary exhibits. However, to have a permanent installation of carefully studied character should be a constant aim. It would seem appropriate that efforts in this direction

follow first the lines of local art development in order to preserve the finest of the local tradition in furniture, china, painting or other art expression.

If a museum reaches a stage of development which allows for exhibits of wider scope, a new opportunity is presented. This is to give a general view of "the arts throughout the ages," using representative originals supplemented by photographs, color prints, casts and other reproductions. The history of art is a vast subject, but like any other it is capable of being surveyed very briefly; there are few rooms too small for the barest outline. The Museum of Fine Arts, Boston, has published a chart entitled: *Synopsis of history with special reference to painting, sculpture and the derivative arts*, which may be taken as a syllabus of exhibits.

Perhaps it is supererogation to suggest further possibilities, but there is an ever present need for expositions of the principal processes employed in the arts. A number of small instructive installations along these lines would do much to create understanding of the other exhibits and might forestall inquiries about "hand-painted" pictures.

TEMPORARY ART EXHIBITS

Museums which have no permanent art exhibits are usually able to secure a succession of borrowed ones, but even though not needed so vitally, temporary exhibits are desirable as elements of freshness which in effect increase the art resources that a museum may have at its command. There are many opportunities to secure such exhibits, since traveling shows—mostly of paintings—are circulated by artists and the commercial galleries which represent them, by museum and by local and national art organizations. The cost to each borrower is usually nominal, being a share of the cost of transporta-

tion and insurance. It is not usually practicable to follow any systematic program in booking exhibits.

Whatever the sponsorship of a traveling exhibit may be, the source of the objects which compose it is the artist, and his reason for offering the works for circulation is the hope that some of them will be sold. Failing the chance to make sales, there would be very few of such exhibits. For this reason, and also because a museum is doing a real service to its community by influencing citizens to buy good pictures for their homes, museums make a practice of offering objects for sale from temporary exhibits. Ordinarily, however, sales *efforts* are not made, the museum merely standing ready to advise prospective purchasers and to negotiate with the artist. Some institutions take the commission to which they are entitled, and some are able to regard their efforts and expenses as contributions to the cause.

Temporary exhibits may also be secured from time to time by borrowing objects from local private collections.

REFERENCES—

Breck, Joseph. General principles of display in a museum of art. Proc. Amer. Ass'n. Museums, 1917, 11: 59–65.

Carrington, Fitzroy. Small print-collections in museums and libraries. Museum Work, Jan. 1920, 2: 118–121.

Howarth, Elizah. The selection of pictures for municipal art galleries. Museum Work, Feb. 1921, 3: 154–158.

Ought museums to sell? Museum Work, March-April 1924, 6: 179–186 (Symposium).

Pennell, Ethel A. Classification for photographs. In: Classification systems used in the library. New York, Metropolitan Museum of Art, 1911, p. 3–29.

Robinson, David M. Reproductions of classical art. Art and Archæology, April 1917, 5: 221–234.

Whitmore, Elizabeth. The function of reproductions in a small museum. Museum Work, Sept.-Oct. 1924, 7: 73–80.

XXIX

SCIENCE COLLECTIONS AND EXHIBITS

THE branches of science which are treated by museums are those relating to the earth and the living things upon it. These are the geological and biological sciences —commonly referred to as *natural sciences*, or collectively as *natural history*. The materials with which they deal are the minerals, rocks, fossils, plants and animals. Man is the last member of this series, and therefore physical anthropology—which has to do with man, the living creature—is part of the field of science. At this point there is a close articulation with archæology and ethnology which, for the present purposes, are regarded as parts of the field of history. Practical reasons for this have already been given—page 7.

There are two quite different interests in science; one focuses attention upon the names and classification of things and the other upon the significance of natural phenomena. The former interest has predominated in museums of the past, but the latter is now well established as an equally important concern. As will be seen, these two interests may find expression differently in study collections on the one hand and in exhibits on the other.

As a basis for shaping the growth of both collections and exhibits, definite determination of geographic range is necessary. Limitations of space and means usually require that a science study collection follow the lines of a specialty in order not to be superficial and relatively useless. On the other hand, exhibits must be rather comprehensive, though not necessarily exhaustive, in order to meet the needs of educational work.

SCIENCE STUDY COLLECTION

The study collection is called upon to assist in identifying specimens found locally and to furnish materials for research. A local collection is adequate to the first purpose, of course, and the work of forming such a collection in any branch of science offers ample opportunity for original investigation. Few small museums find occasion or facilities to undertake anything more ambitious. Efforts should be made to extend the collection in directions for which the local region offers unusual material. Almost every locality is a good collecting ground for some specialty, and by taking advantage of opportunities, a museum may add greatly to the importance of its series and also prepare itself to assist other institutions.

Because of the character of museum materials, the research worker who is drawn to a museum—be he a member of the staff or a visiting student—is likely to be one whose interest is primarily in classification and nomenclature. Such investigators usually carry on some collecting in connection with their studies, and material so acquired ultimately becomes part of the study collection if the worker is connected with the museum. In this way the collection naturally becomes an instrument of identification, and the usefulness of the material is enhanced by its use. Given the interest, the development follows.

Thus, so far as the study collection is concerned, local scope, treatment of all the natural sciences, and emphasis on collecting and taxonomy are to be expected.

PERMANENT SCIENCE EXHIBITS

The exhibits are called upon to deal with natural history in such a way that a general view of the more important facts and laws of nature may be gotten from them.

Therefore, they are required to be much more than a synopsis of the study collection; they should convey an understanding of the work of natural forces as manifested by inanimate objects and living creatures in the out-of-doors. This is a difficult undertaking, and one which might absorb the entire energies of a large institution. But however modest they may be, exhibits may be designed to present the same whole—slenderness of resources limiting elaborateness of treatment rather than range of subject matter. The following outline suggests the essentials of permanent exhibits:

EARTH—origin, geologic forces that have transformed it and stages through which it has passed, materials and structure with special reference to locality.

FOSSILS—character of fossils, evolutionary series, local fossils.

BIOLOGY—lifeless and living matter, the cell, simple organisms, tissues, elements of physiology, embryology and heredity.

PLANTS—plant structure and classification, synopsis of local flora.

ANIMALS—animal structure and classification, synopsis of local fauna.

Mounted or preserved specimens are used extensively, but pictures and models are necessary to bring out certain subjects. Groups are usually employed; they are ideal for synoptic presentation of such subjects as life associations—plants and animals of the desert, the forest, the ocean, fresh water and other environments.

Thus in the permanent exhibits wide geographic scope, treatment of all the natural sciences, and emphasis upon principles are appropriate.

TEMPORARY SCIENCE EXHIBITS

Temporary exhibits afford opportunity to touch here and there upon subject matter which lends itself rather poorly to presentation in the permanent exhibits, chiefly because it requires detailed elaboration. This matter is *applied* science—science in relation to man. Popular interest attaches to all branches of this field and treatments of them may be of great practical usefulness.

Personal hygiene and public health are especially fruitful fields. Exhibition material that is appropriate for temporary installation may be secured from national organizations interested in cancer, tuberculosis, child health and related subjects, and museums may contribute largely to health education by interesting themselves in such possibilities. Science as applied to the farm offers a further series of opportunities in connection with which the U. S. Department of Agriculture is invariably ready to cooperate through its local agencies.

The temporary exhibits also afford means of interpreting the most important current events in science. An eclipse, an earthquake or a discovery may be explained in a simple exhibit which may actually be more effective because of any informality or crudeness it may have in consequence of hasty preparation.

Living plants and animals are often used to advantage as temporary exhibits. A certain western museum has two tables near the entrance—one for local plants and the other for local animals. Every week a new living individual is placed on each table in a pot, tray or cage as required, and nine persons in ten who enter the museum inspect these two exhibits and read the typewritten labels carefully. Quite like this plan is that of a table upon which cut or growing wild flowers are shown in continually changing combinations as the season progresses.

Living insects may also be shown. From such installations it is but a step to outdoor exhibits.

REFERENCES—

There is an extensive literature on science collections and exhibits which can be found through the general references listed in Appendix G. The following titles are noted because they touch upon certain key problems.

BAKER, FRANK C. Suggestions for an educational exhibit of molluscs. Proc. Amer. Ass'n. Museums, 1909, 3: 56–59.

BUMPUS, H. C., and CUMMINGS, C. E. (Series of articles outlining plans for science exhibits.) Hobbies (Published by Buffalo Soc. Natural Sciences), Dec. 1925.

JOHNSON, CHARLES W. The insect collections of a museum. Museum Work, Feb. 1919, 1: 154–158.

MORRIS, EDWARD L. The possibilities of botanical exhibits. Proc. Amer. Ass'n Museums, 1912, 6: 105–108.

WARD, HENRY L. Exhibition of fossils and skeletons in popular museums. Proc. Amer. Ass'n. Museums, 1910, 4: 100–103.

XXX

COLLECTING

To the scientist, collecting is field work—hunting birds and mammals, capturing invertebrates with net, dredge or other apparatus, searching for plants, digging for fossils and scanning quarries for rocks and minerals. To the historian, it is prowling about shops, delving into attics, ransacking files and interviewing old inhabitants; or, if the interest is in archæology, collecting is excavating for remains. To the art collector it is chiefly purchasing. The director and staff members of a small museum may indulge in all of these activities from time to time.

In most kinds of collecting there is opportunity to enlist volunteer help, but in doing this two dangers are likely to be encountered. In the first place, amateur collecting is usually indiscriminate and destructive. Serious vandalism results from untutored efforts to collect living creatures and to explore archæological deposits. A museum stands for conservation; it should emphasize its specific needs and discourage rampant gathering; it should lay stress upon opportunities for preserving wild life and historic deposits as outdoor exhibits or as treasures which untrained hands should not molest.

The second danger is that the amateur collector will not make proper records in the course of even the most restrained collecting. An object without data may be useless.

The most profitable field for amateur effort is that of local history. Certain of the homes in every community contain objects and records of the utmost historic importance, some of which may be attracted to a mus-

eum. Much material of this sort is looked upon as junk until discovered by someone who understands its importance. Newspaper articles are very effective in bringing things to light.

Local museums may view with concern the activities of motor tourists in picking up antiques and taking them away, chiefly to the large cities where ultimately many of them come upon the market. Public spirit will prevent the disappearance of much really important material if people are educated to look upon a museum as an agency through which they may discharge their stewardship of heirlooms.

The technique of collecting is treated quite fully in the literature of museum work.

REFERENCES—

Blake, S. F. Directions for collecting flowering plants and ferns. U. S. Department of Agriculture, 1920, Circular 76, 8 pp.

Holmes, William Henry and Mason, Otis Tufton. Instructions to collectors of historical and anthropological specimens. U. S. National Museum, 1902, Bulletin 39, Part Q, 16 pp.

Lutz, Frank E. How to collect and preserve insects. American Museum of Natural History, 1914, Guide Leaflet 39, 21 pp.

Rowley, John. Taxidermy and museum exhibition. New York. D. Appleton & Co., 1925, 331 pp.

Tassin, Wirt. Directions for collecting minerals. U. S. National Museum, 1895, Bulletin 39, Part H, 6 pp.

Other titles may be found in the *Bibliography of museums and museumology*, for which see reference in Appendix G.

XXXI

MUSEUM RECORDS

THE importance of adequate and accurate records of museum collections can hardly be overstressed.

Although many seemingly disparate methods of keeping records are in use, the sheer force of circumstances has made all successful systems fundamentally alike. A method embodying the essentials may be none too cumbersome for the simplest needs, and yet it is capable of development to any degree. The only necessary differences between the methods of a large museum and those of a small one are part of the paraphernalia required to make a large staff coordinate and to take care of the many details that result from the work of specialists. The greatest *seeming* disparities are produced by the use of many names for each thing, and the differences in layout of books and blank forms. These various individualities disguise some established systems so completely that they appear to have little in common.

The records described below may seem too elaborate for a small museum. However, as a matter of fact, the books and files are quite simple although the explanation of them may be confusing at first. The best way to set up a new system is to begin with the basic records and the index—dispensing with the others until the need for them becomes manifest. In the discussion, allusions are made to the registrar and the curators, but it must be understood that the methods are just as usable by the lone and unassisted director of a very small museum as by the staff of a larger institution. It is only for convenience, that functions are here regarded as attaching to different individuals.

There are two basic, or irreplaceable, records and several auxiliary, or derived, ones.

BASIC RECORDS

The basic records are:

ACCESSION BOOK—a list of materials received, by lot, in the order of arrival, with a record of the character of each lot and business transactions involved.

Note. An accession, by definition, is a batch of material received at one time from one source. It represents a single transaction and may include one object or many. The material need not be an acquisition; it may be received on approval or loan; it may be a travelling exhibit.

CATALOG—a list of single objects or specimens, in the order in which they are worked into the collections, with a record of the character of each object and facts about it that may have value to a student.

These records articulate with the collections by numbers—of which there are two for each object:

ACCESSION NUMBER—the number assigned in the accession book. The letter *A* is prefixed to this number to distinguish it.[1] If there are several objects in one accession, the accession number is the same for all of them, but if, in the case of material received on approval or loan, it is desired to differentiate between the items of an accession, subscripts may be employed:

$$\frac{\text{A } 1025}{1}, \quad \frac{\text{A } 1025}{2}, \quad \frac{\text{A } 1025}{3}$$

[1] Some museums prefix the letters *TR* instead of *A*, but it would complicate this account needlessly to explain the usage.

Accession numbers should progress in one continuous series from the time the museum is founded. Large museums prevent the numbers from mounting too high by prefixing the year to the number and starting a new series annually—A 24–350 being the 350th accession of the year 1924. A small museum need not follow this practice.

The accession number is affixed temporarily to objects and may be marked only on the box or container of an accession which is stored before being unpacked. In due course it is replaced by the catalog number which is put permanently on every object that is acquired. The technique of numbering and tagging is the subject of the next chapter.

CATALOG NUMBER—the number assigned in the catalog. Each object has a different number.[1] If there are several departments, each should be allotted a block of numbers and when a department has used up its numbers it should receive, as a new assignment, the lowest block that remains unallotted. Science may need larger blocks of numbers at each assignment than history or art. It is bad practice for each department to have its own independent series of numbers, even though initial letters be used to differentiate them. When only one series is used, a new department may be set off from an old one at any time without changing a single number or record of the material transferred. This is important for a growing museum.

Catalog numbers are used up faster than accession

[1] There is one class of exceptions to the rule that each catalog number belongs to one object only. In the case of coins, insects, shells or other material of which many duplicates may come *from the same place at the same time and with the same data*, the duplicates may all be given one catalog number, and a note made in the catalog of how many there are. If any objects of the lot should later be discovered to have notable individuality, they would be re-cataloged on new numbers of their own.

numbers. To prevent awkwardly long numbers, the year may be prefixed and a new series begun annually. Under this plan, a department may use the same block of numbers each year.

THE ACCESSION BOOK

The accession record is usually kept in a bound book so that leaves cannot possibly be misplaced or lost. The book may be made to order or improvised with columns and headings so arranged that the record of each accession occupies a single line across both pages.

Entries are made by the registrar. Immediately upon receipt, each accession[1] is given the lowest vacant accession number, and the following information—or as much thereof as may be known—is entered.

Acc. No.
Description (*including condition, number of objects, marks on packages, etc.*)
Date of receipt
Received from
Address
How acquired—on approval, gift, purchase, exchange, loan
Value or price
Collector
Locality
When collected
Remarks (*including reference to page of minutes if board takes action*)
Department assignment
Cat. Nos. (*These are not assigned until objects are catalogued*)

[1] Library books and material for the lending collection need not be accessioned unless desired.

It may be that all facts are not known, and in that event some items may be skipped or a general statement made. For example, the entry under *Description* may be very general; "Two barrels of pottery." In such cases further information will ultimately be reported back by the curator and will be filed to complete the accession record, as explained shortly. Bills of lading, invoices, lists of objects, agreements of gift or loan, correspondence and other matter relating to any accession may be marked with the accession number and put in an envelope or folder and filed by number. Envelopes 4 by 9½ inches are always obtainable and are accommodated on end by standard filing cabinets; regular correspondence file folders are preferred by some museums.

When borrowed objects are returned or pieces held on approval are declined, record is made in the accession book in the *Remarks* column. If acquired material includes some undesirable things that are discarded before cataloging, brief notation of the fact may be made in the accession record.

The catalog numbers that are assigned in due course to all acquired objects are reported back by a curator to the registrar and are added to the entry in the accession book. If the list is a long one, it may be filed in an accession envelope and the words "See envelope" written in the book to show that the entry has been completed.

THE CATALOG

The catalog may be either a bound book, a loose-leaf book or a card file. To be sure, a bound volume keeps records from straying, but most museums use cards and take care of them. A rod-lock is helpful in this connection. Cards of 6 by 4 inch or 8 by 5 inch size are most serviceable. They should be of heavy paper rather than cardboard, so that carbon copies can be made. Cards of

different departments may be of different colors, or bear department stamps.

Ordinarily, material that is acquired should be cataloged soon after being accessioned, but some lots may have to remain packed, and therefore uncataloged, for months or even years. Objects that are not acquired need not be cataloged at all—the accession number being sufficient, temporarily, for purposes of identification. However, no confusion is caused by cataloging any object that is to be retained for a long time; to do so may be convenient.

The catalog is kept by the curators, and each curator may have his own part of it—called a *department catalog*.

In a museum having a registrar, that officer should type all cards from memoranda supplied by curators and information in the accession book. He should make an original and two carbon copies—the original for a general catalog kept in the registrar's office, one copy for the appropriate department catalog and one for the index, which is still to be described.

Cards should provide for entries as follows:

Cat. No.
Acc. No.
Description[1]
Collector
Locality
When collected
Condition—good, fair, bad
Original No. (*number assigned in the field or by previous owner*)
Identified by
Remarks

[1] Each department may introduce its own subdivisions, for example: *history*—name, material, history, use; *science*—name, sex, growth; *art*—title, artist, school, medium, period, size, marks, value.

This list includes three items—*Collector, Locality* and *When Collected*—which are transcribed from the accession record. It does not include the following, which are in the accession book: *Date of receipt, Received from, Address, How acquired, Value or price.* If any of these facts are needed in the catalog, they may be entered under *Remarks.* Ample space should be left under this heading since the carbon copy used for the index is likely to receive additional notations from time to time.

If a cataloged object is removed from the collections for purpose of gift, exchange, sale or discard, its catalog card is cancelled but not removed from its place in the file; the number should never be used over again. The card of any borrowed object that has been cataloged is treated in the same way when the object is returned. All such deletions may be brought together for quick reference in a *disposal record* described below.

AUXILIARY RECORDS

Besides the accession book and the catalog, which are basic irreplaceable records, there are the following auxiliary, or derived ones.

INDEX—a systematic rearrangement of listings in the catalog. It is a key to kinds of objects; therefore, it indexes the catalog by subject.

Synonyms: specimen index, object index, finding list, location file.

DONOR RECORD—a key to donors and their gifts. It may include sources from which purchases are made and exchanges received.

Synonyms: donor index, source index, source list.

LOAN RECORD—a memorandum record of loans made or received. (This has nothing to do with the regular lending collection which has independent records.)

DISPOSAL RECORD—a list of material exchanged, given away, sold or discarded.

THE INDEX

The index is a file made up of one carbon copy of each catalog card. Some museums reserve a portion of the card for a sketch; others paste a photograph on the back of the card in the case of any object that is sufficiently important. Art museums which have staff photographers and are able to carry out the plan extensively, use a sensitized card on the back of which the photograph may be printed directly.

The arrangement of cards is by subject classification corresponding to that of material in the study collections. The file is kept by the curators and each curator may have his own part of it—called a *department index.*

The index serves to organize information contained in the catalog. It shows what material the museum has along any line, and furnishes a flexible record to which new items may be added as facts are brought to light through work on the collections. Each new notation should be dated and initialed by the person—presumably a specialist—who is responsible for it.

The whereabouts of material that is out of its place in the study collections—whether on exhibition or on loan—should be shown in the index. The notes are made in pencil so that they can be erased. They are curators' memoranda—not part of the regular loan record, which is still to be described.

Cards of a distinctive color may be used to index ob-

jects that are not actually in the museum collections. In this way a register of private collections and of certain outdoor exhibits may be maintained if desired.

THE DONOR RECORD

The donor record is an alphabetic card list of persons from whom gifts have been received, and it may also include names of those from whom material has been acquired by purchase or exchange. Small 5 by 3 inch cards usually provide ample space.

The first card for each person should show full name and address. If one donor's record requires more than a single card, each subsequent card may have its upper margin clipped off to facilitate reference, but it should bear the donor's name. The back of a card should never be used. The material received is indicated by accession number, and, for convenience, the date description, value and whether gift, loan, purchase or exchange may be noted. All of this can be put on one line in most cases.

THE LOAN RECORD

As already indicated, records of loans *received* are entered in the accession book, and memoranda of loans *made* are penciled in the index. The *loan record* is an assembly of these items arranged to serve as a reminder of dates upon which loans are due to be returned either to or by the museum. A card file with dated guides lends itself admirably to the purpose.

Loans received and loans made are both recorded in the same file and, for economy, may be on the same form of card, but to differentiate between the two, different colors or distinguishing marks should be used. The facts to be shown are:

Name (*of borrower of lender*)	To be returned on
Address	Date of loan
Acc. No. (*of loans received*)	Date of return
Cat. No (s). (*of loans made*)	
Description	
Department	
Remarks	

A loan of many objects made at one time requires only one card, but if it is to be returned in parts at different times, each part should be treated as a separate loan. The cards are filed by the date—approximate or exact—on which the loan is to be returned. When a loan is returned, its card should be removed from the chronological series, and, after the date of return is noted, it should be filed permanently in the back of the drawer, by the name of the borrower or lender.

The loan record should be kept by the registrar, and if a curator desires to make or secure a loan he should transact the business through the registrar's office. Of course this does not refer to operation of the regular lending collection, discussed in chapters XXVI and XLI.

THE DISPOSAL RECORD

As already noted, if a useless object is weeded from an accession before cataloging, the only record needed is a memorandum in the accession book under *Remarks*. However, for a cataloged object that is exchanged, given away, sold or discarded, some record in addition to the cancellation on the catalog card is useful. To bring scattered cancellations together, the *disposal record* is kept, but no time should be wasted in elaborating it. An informal chronological journal kept by the registrar in a blank book is sufficient. Each entry may include:

Date
Cat. No.
Description
Exchange, gift, sale or discard (*and circumstances such as material received in exchange or price*)
Name of recipient (*if exchange, gift or sale*)
Address

XXXII

NUMBERING AND TAGGING

For purposes of identification, every object should be numbered.

At the time of accessioning, the accession number—with its prefixed *A*—is marked temporarily on the object or its container, or on a tag or gummed label which is attached. Some museums prefix the two letters *L A* (lent accession) to the number of a borrowed object, so that it may be recognized instantly. For a traveling collection, it is helpful to use a sticker or tag bearing the initials of the museum to differentiate it from other borrowers' labels which accumulate en route.

When an object is cataloged its catalog number—which, unlike the accession number, is different for each object—is affixed permanently. If possible, it should be inscribed on the object itself, but failing that, it may be put on tag, base, or container. The accession number is then obliterated, or, if it has been carried on the container only, it is dismissed from mind. Data and numbers of previous owners or of collectors should not be disturbed unless they are actually disfiguring, in which event they may be copied into the catalog in the columns provided for the purpose. Original tags may deserve to be pasted into the catalog, or otherwise kept.

If an object has several parts that may be separated, customarily all are numbered, each part being given its own letter: for example, 551a, 551b, 551c. The letters should be noted in the *Remarks* column of the catalog.

A tag, if one is used, may bear data in addition to the catalog number, but such label-tags should not be confused with exhibition labels which are of a very different

sort and should never be depended upon for numbers or other records. Exhibition labels are usually not attached to objects and therefore are frequently transposed or lost.

The character of each object determines the way in which its number is to be affixed. For direct marking a convenient medium is a paint made by mixing Chinese vermilion oil color with siccatif de courtray—both obtainable from any dealer in artists' supplies. Marks made with this paint are lasting in use, but they may be erased. For light-colored objects, waterproof ink is excellent if the surface will take it. There should be some system of placing numbers, particularly on large objects, so that they may be found easily. Bases or backs of objects are usually the best places for them, but almost any practice is satisfactory if it is followed consistently for each class of material. On anything that cannot be moved easily, the number should be in sight but need not be obtrusive.

Some objects are not markable, and therefore must be tagged—but not with gummed stickers that fall off. For each class of material there is a more or less special tagging technique. An alcoholic specimen usually has a slip of paper inserted in the bottle with it, or a cloth tape tag attached to it by a loop of thread. The number may be penned with waterproof ink or stamped. An insect label is a very small paper one that may be put on the pin. Bird and mammal skins and many other kinds of objects are tagged with printed paper labels on which name, locality, date and other facts are written.

Objects of wood and any that have wooden bases may be tagged with small metal plates into which numbers are stamped with steel dies. Neat plates of German silver, called *umbrella plates*, may be purchased,[1] but cheap

[1] These are sold by the New York Stencil Works, 100 Nassau Street, New York City. The most useful size is *No. 2.*

substitutes may be made by cutting strips of copper or aluminum. Very small objects, such as shells or coins, are usually kept in little cardboard boxes or trays which bear the numbers, but the attendant risk of misplacement should not be taken if it is practicable to mark numbers directly. Scientific types—that is, specimens from which species new to science are described—should be marked in some distinctive way. A red label or tag is sometimes used for the purpose.

The standard method of numbering or tagging each class of material would be known to any specialist whose aid might be sought in organizing and arranging the collections.

XXXIII

PREPARATION

In museum parlance, the term *preparation* is understood to mean the process of making objects ready for the study collections or the exhibits. It includes preservation, restoration and mounting of material, whether carried on in the field, shop or studio, and also takes in model-making and kindred arts in which molding, casting, coloring and various other mechanical or artistic processes are involved. Plants and animals, being perishable, require more attention than inanimate objects, and therefore a great majority of preparation methods are those which apply to science materials, but much of the technique of cleaning, repairing and preserving is applicable to objects of other kinds—especially works of art.

The following classification[1] is suggestive of the variety of preparation methods. The materials of history seem not to have much recognition, but this is because such objects are either treated by *general* methods, or else require no special preparation.

.4 COLLECTING[2], PREPARING, RESTORING

.41 Modeling, Molding, Casting, Coloring

.411 Modeling, Pattern making

1 In clay, plastilin, etc.

2 In wax, paraffin, etc.

[1] This is part of a classification of museum methods which was prepared by the author and published in tentative form in the 11th edition of Melvil Dewey's Decimal classification. An extensive revision appears in the 12th edition, from proof of which the present excerpt is made. It is all built upon the number 069, which for simplicity is here omitted—only the decimal divisions being shown.

[2] Collecting involves preparation in the field.

3 In plaster
4 In gelatin, glue, etc.
5 In celluloid
6 In glass
7 In wood
8 In papier-mâché, paper, etc.
9 Other

.412 Molding
1 In clay, sand, etc.
2 In wax, paraffin, etc.
3 In plaster
4 In gelatin, glue, etc.
5 In celluloid
8 In papier-mâché, paper, etc.
9 Other

.413 Casting
2 In wax, paraffin, etc.
3 In plaster
4 In gelatin, glue, etc.
5 In celluloid
8 In papier-mâché, paper, etc.
9 Other

.414 Electroplate reproduction

.415 Coloring
1 On fabric
2 On wax, paraffin, etc.
3 On plaster
4 On gelatin, glue, etc.
5 On celluloid
6 On glass
7 On wood
8 On papier-mâché, paper, etc.
9 Other

.42 Models Construction

.422 Relief maps, Panoramic models

.423 Ethnological models

.424 Architectural models
Including exteriors and interiors

.425 Caves, etc.

.426 Mechanical models
Including astronomical, physical and chemical models

.427 Animals: entire or dissected
1 Isolated organs or tissues
2 Invertebrates
6 Vertebrates
7 Fishes
76 Batrachians
8 Reptiles
9 Man

.428 Plants
2 Plant accessories for groups, etc.
3 Fruits, vegetables, etc.

.429 Miscellaneous
1 Prepared foods

.43 Groups Construction

.432 Artistic Composition, Layout

.433 Field work

.434 Background
2 Transparent photographic
3 Opaque photographic
5 Painted

.435 Foreground

.436 Case and lighting

.437 Small-scale groups

.438 Enlarged-scale groups

.447 Protection of Museum Materials

2 Museum pests
Poisoning, insecticides, pestifuges, fumigation

4 Prevention of decay by chemical action, rust, bronze diseases, etc.

.45 Science Objects

.455 Rocks, Minerals
4 Field work
6 Laboratory work, Mounting

.456 Fossils
4 Field work
6 Laboratory work, Mounting

.458 Plants
4 Collecting, Pressing, Preserving
6 Mounting
For reproduction in wax, etc., see .428

.459 Animals and animal tissues

2 Invertebrates
22 Field notes, Sketches, Photographic studies
24 Capturing, Killing, Preserving
25 Transporting, Storing
Includes preserving fluids, etc.

26 Mounting: dry or in fluids
Includes both whole-mounts and dissections. For reproduction in wax, etc., see .4272
27 Nests, workings, etc.

6 Vertebrates
62 Field notes, Sketches, Photographic studies
64 Capturing, Killing, Preserving
65 Transporting, Storing
66 Skinning, Tanning, Taxidermy
For reproduction in wax, etc., see .4276
67 Nests, workings, etc.

68 Anatomical material
682 Field notes, etc.
683 Fluid and jelly methods for soft tissues and embryos
684 Dry methods for soft tissues
685 Bone, Skeletons, Cartilage
686 Gross clearing
687 Gross staining and sectioning
688 Injection
689 Other methods

.46 Industry Material, Commerce Material

.47 Art Objects

.472 Architecture

.473 Sculpture
2 Restoration
4 Cleaning
Includes cleaning of casts
8 Ceramics, Glass

.474 Drawings

.475 Paintings
- 2 Restoration
- 3 Repainting
- 4 Relining
- 5 Rebacking
- 6 Cradling
- 7 Varnishing
- 8 Gilding

.476 Engravings
- 2 Cleaning, Washing
- 3 Mounting
- 4 Matting

.477 Textiles, Weaving
- 2 Repairing
- 3 Cleaning
- 4 Mounting

.478 Wood work

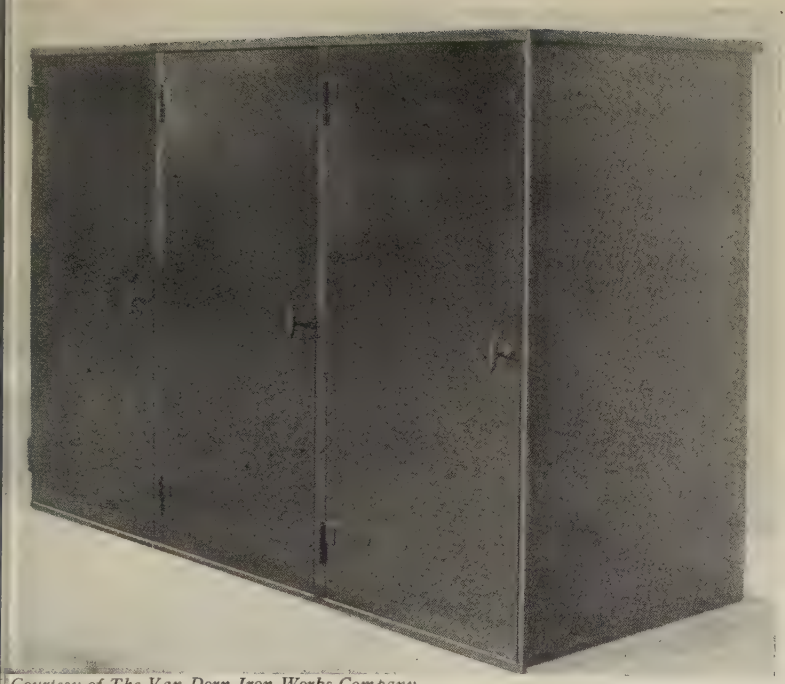
5 Metal work

.479 Other

.49 History Material

There is an extensive literature of short articles and pamphlets bearing upon one or another of these topics, and a few general treatises. A selection of useful references is appended. It is quite impossible to condense this mass of information for purposes of this book, but museum workers may easily familiarize themselves with references which bear upon their particular interests.

A good part of the technique required for the work of a small museum may be mastered in a short time by a



Courtesy of The Van Dorn Iron Works Company.

METAL PILING UNIT FOR STANDARD TRAYS.

reasonably skillful person. Some museums avail themselves of part-time services of young people who, through interest and natural dexterity, become very proficient in general work and who may learn some taxidermy. There is usually need also for the assistance of a trained preparator, but funds may not be available to employ such a technician for full time. The best solution of this problem is cooperation—several museums contributing to the salary of one man and sharing his time. Failing this, a small museum may seek the help of a larger institution or give its patronage to one of the few commercial taxidermists who do good work.

So far as practicable, a museum should preserve data, drawings, photographs and molds from which models are made, in order to assist any other museum that may desire duplicates. Such helpfulness is a manifestation of the new spirit in museum work.

REFERENCES—

The literature on preparation relates almost entirely to the materials of science, and is quite extensive. For titles on special methods, reference may be made to the *Bibliography of museums and museumology* and the index of serials published by The American Association of Museums—for which see references in Appendix G. The most useful general treatises are:

HERMANN, A. Modern laboratory methods in vertebrate paleontology. Bulletin American Museum of Natural History, 1909, 29: 283–331.

LUCAS, A. Antiques. Their restoration and preservation. London, Edward Arnold & Co., 1924, 136 pp. With a bibliography.

ROWLEY, JOHN. Taxidermy and museum exhibition. New York, D. Appleton & Co., 1925, 331 pp.

The following papers relating to art objects may be noted:

Ivins, William M., Jr. Mounting and preservation of prints. Museum Work, March 1919, 1: 173–179.

Jackson, Margaret T. Cleaning of plaster casts. Proc. Amer. Ass'n. Museums, 1914, 8: 150–151

XXXIV

HOUSING THE STUDY COLLECTIONS

The study collections should be so arranged and housed that without inconvenience any object may be brought out for examination. Since the amount of material may be relatively large for the space available, compact arrangement is necessary, but material must not be packed away in such fashion that it is inaccessible. If this is done the purpose of study collections is defeated.

For small objects suitable boxes or trays are usually provided and those which contain related material should be interchangeable. For the accommodation of these containers, shelves or racks are necessary. Fairly large objects are shelved individually; very large objects are usually kept on exhibition and, therefore, do not complicate the problem.

Everything must be protected more or less from dust, and objects of some kinds need to be kept behind tight doors which afford protection from both dust and insects. If cases are made for this purpose, doors should be packed with felt at the margins, but hermetic sealing should not be attempted as this favors the growth of molds. Excellent metal cases and compartments may be purchased,[1] but for some classes of material, ample protection is afforded by simple accommodations which may be improvised. Trays like those shown in the accompany-

[1] For general purposes the best storage cases are believed to be the *piling units* manufactured by the Van Dorn Iron Works Company, New York. Other equipment for the same purpose is made by the Cambridge Botanical Supply Company, Waverley, Massachusetts; Kny-Scheerer Corporation, New York City; and the Weber Showcase and Fixture Company, Los Angeles.

ing figure are much in use. The sides are of pine and the bottom of homosote—a cheap but serviceable composition board.[1] The overhanging edges of the bottom may be shellacked to prevent wear. If necessary, these trays may be stacked on the floor until funds are available to provide housing for them as shown in the drawing.

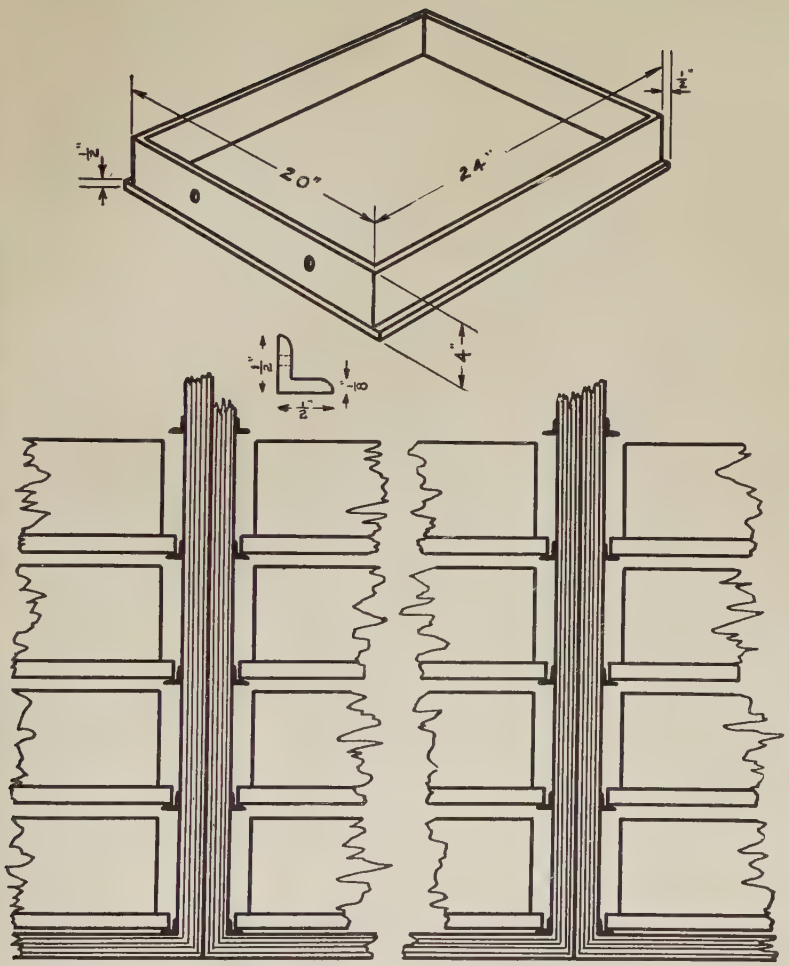
For the preservation of science specimens various special boxes, bottles and mounts have been developed. These are familiar to everyone who works with such collections. History materials are so diversified in character that shelves, trays, racks and other means are necessary for their accommodation. Many art objects are kept in similar ways. Framed pictures, in preference to being stacked, should be hung on large rectangular screens made usually of gas pipe with coarse wire mesh stretched over it. Mounted photographs and prints are kept in filing cabinets and portfolios.

PROTECTION FROM PESTS

There are several species of insects which destroy fabrics, feathers and a surprising variety of other substances. A minute beetle, the common clothes moth and a primitive insect, the *silver-fish*, are the most troublesome. Precautions against ravages of these pests are taken in the preparation of many objects, but usually vigilance has to be kept up indefinitely.

The surest way to get rid of pests is to fumigate with hydrocyanic acid gas in an airtight compartment, but this is a dangerous procedure which has resulted in loss of human life. The practice is not recommended. Another fumigant that is widely used is carbon bisulphide, but this is highly explosive and has caused serious accidents. Naphthalene is claimed by some to be ineffective; moth balls are useless.

[1] Homosote is made by the Pantosote Company, Trenton, N. J.



TRAYS AND RACK FOR ACCOMMODATION OF STUDY COLLECTION MATERIAL.

There are two insecticides which are coming into general use. The first is para methyl dichloro benzin—a crystalline compound of not unpleasant odor which seems to have no ill effects upon persons who are exposed to it. It is usually enclosed in pill boxes with perforated covers, and put in cases, boxes, drawers or wherever needed. The other substance is carbon tetrachloride. It may be dropped or poured on objects that are infested, and after evaporation it will be found to have caused the death of any pests with which it has come in contact. It does not stain or do other damage even to delicate textiles or the wings of butterflies.

REFERENCES—

Brues, C. T. The insect pests of museums. Proc. Amer. Ass'n. Museums, 1909, 3:33–54.

Hough, Walter. The preservation of museum specimens from insects and the effects of dampness. U. S. National Museum Report, 1887, 549–558.

Toothaker, Charles R. Fumigation. Proc. Amer. Ass'n. Museums, 1908, 2:119–123.

XXXV

EXHIBITION CASES[1]

CASES are necessary evils required to protect objects from dust and the fingers of museum visitors. The less obtrusive they are, the better, but since they cannot be altogether inconspicuous they should be tasteful. A suitable case is a setting for its contents as well as a protection to them.

TYPES OF CASES

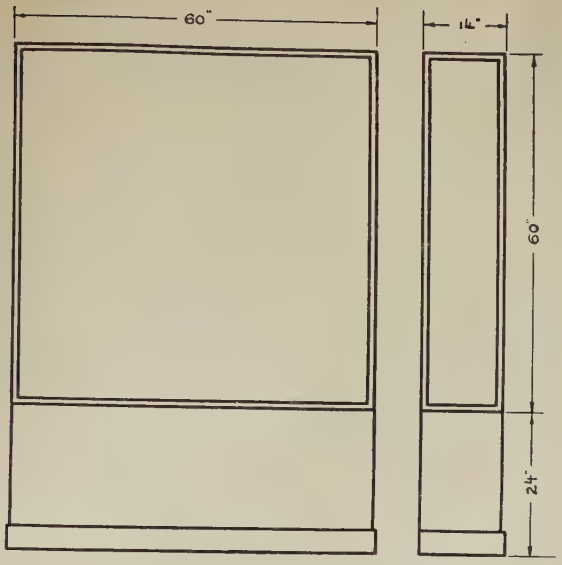
Cases are described as *vertical* or *horizontal* according to the position of the glass through which the objects in the case are viewed. Three types—two vertical and one horizontal—are in most general use.

WALL CASE—a vertical case with glass front and opaque back, intended, as the name implies, to be set against the wall. The relatively narrow edges are of glass, and usually the top is of ground glass.

CENTER CASE—a vertical case with all four sides of glass, intended to be set in an open space and viewed from any quarter. The top is of glass to admit light.

TABLE CASE—a horizontal case with glass top through which objects are viewed from above. The relatively low sides are of glass.

[1] Cases are manufactured by Rand Kardex Corporation (of which the Library Bureau is now a division), New York City; The Van Dorn Iron Works Company, New York City; Kny-Scherer Corporation, New York City and A. N. Russell & Sons Company, Ilion, New York. Catalogs are mailed on request by these concerns. The Art Institute of Chicago, The Cleveland Museum of Art and the Museum of Fine Arts, Boston, make special cases to the capacity of their shops.



A.—WALL CASE OF SIZE PROPOSED AS STANDARD.

Courtesy of The Newark Museum.

B.—WALL CASE WITH METAL FRAME AND WOOD SOLID BASE.

There are many other kinds of cases in use—the commoner being the *desk case*, which is a table case with sloping top, the *combination case*, which is a desk case surmounted at the back by a small wall case, the *A-case*, which is a center case with two slanting sides like steep flys of a tent, and the *alcove case*, which is the equivalent of two wall cases back to back. However, a wall, center or table case will serve any purpose. Other types are not as generally useful as these three and therefore are not as good investments. Special cases are required for museum groups and these are described in the chapter on groups—page 236.

TYPES OF BASES

Of bases to support exhibition cases there are two common types: the *solid base*, which is essentially a box, and the *leg base*, which is a specially designed table. A wall case should have a solid base; a table case, a leg base; a center case, the one or the other, depending upon height. A leg base less than perhaps 24 inches high looks squatty; a solid base of more than that height is clumsy in appearance.

A solid base is provided with a toeboard at the floor line to take the contact of shoes and mops. This also adds to the appearance by making a sort of sub-base. The practice of utilizing a solid base as a cabinet for storage is strongly discouraged as false economy.

DIMENSIONS

Comparison between measurements of carefully designed cases and dimensions that are required for elimination of the eye-strain and muscle-strain which contribute to museum fatigue, show that ideals are usually sacrificed to some extent for practical reasons. Wall cases tend

to be too low-based; wall cases and table cases, too deep; table cases and center cases, too wide. These departures represent efforts to secure maximum space and a degree of standardization, as well as to meet the needs of both adults and children. In the same way, dimensions which might be put forward as general standards, in order to be practical, must embody some compromises. With this understanding the following specifications are recommended:

WALL CASE—over all, 84 inches high by 60 inches wide by 14 inches deep; solid base 24 inches high. See Plate 12.

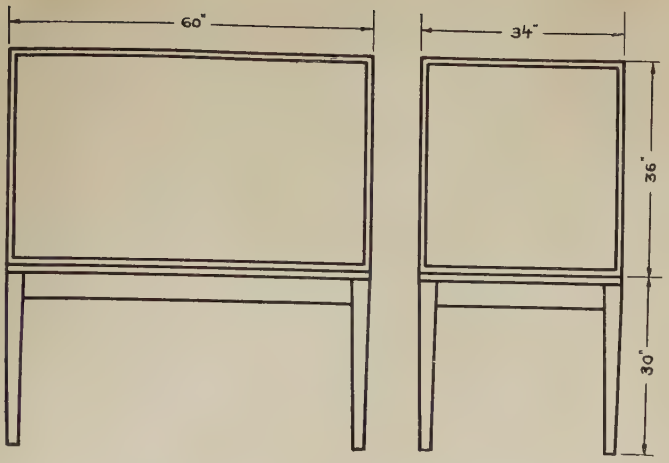
Note. For small objects a shallow case is desirable, but for general use the greater depth is necessary. Small objects may be brought forward by the use of a false back or individual supports.

CENTER CASE—over all, 60 inches long by 34 inches wide by 66 inches high; leg base 30 inches high. See Plate 13.

Note. For very large objects greater exhibition height may be secured by use of a solid base only 18 inches high. The top of the case in either event should be at the same level, namely, 66 inches from the floor.

TABLE CASE—over all, 60 inches long by 24 inches wide by 38 inches high; leg base 30 inches high. See Plate 14.

For special purposes, cases of special size may be required, but ordinarily those of standard sizes are more useful. False backs and bottoms, to decrease depth for small objects, are described in the chapter on installation —page 217.



A.—CENTER CASE OF SIZE PROPOSED AS STANDARD.

Courtesy of The American Museum of Natural History.

B.—CENTER CASE WITH WOOD FRAME AND LEG BASE.

MATERIALS AND CONSTRUCTION

The trend at present is strongly towards cases with metal frame and wood base, although all-metal cases and all-wood cases are in some favor. Metal—that is, either steel or bronze—is superior to wood for frame members because of its greater strength and the slenderness and grace of construction to which it lends itself in consequence. Wood is desirable for bases because it takes a good finish and is light and relatively inexpensive. Its use does not add appreciably to the fire hazard, because museum fires start in basements and storages, not exhibition rooms. A conflagration spreading to the exhibits would probably destroy them even in metal cases.

Wood is favored for frames by many people on account of the advantages that prompt general use of it for bases, namely, possibilities of finish, light weight and low cost.

Ease of access to a case is important, and may be provided for in several different ways. The entire frame of a table or center case may be lifted from its base, but this is a difficult operation except with mechanical aid. The best lifting device which has been produced is a rack and pinion mechanism to be concealed in the base. It is employed in the so-called *MacLean case* which has never been commercialized, but which at times may be obtained to order from the museums mentioned in the footnote on page 198. Swinging and sliding doors are also used, but in the most generally adopted case there is a simple knock-down construction which permits any sash to be detached and taken out. Library Bureau bronze frame museum cases are made in this way. They are assembled with steel clips which may be put on by hand and removed with a lever-key. An approach to this construction is embodied in wood frame cases that

have one or two removable sashes—a design adopted by many museums. Screws are used as fastenings.

Most cases on the market have special packing in the joints to make them dust-tight and insect-proof. This is essential.

Shelves are used to some extent, most often in wall cases. This subject is discussed in connection with installation—page 218.

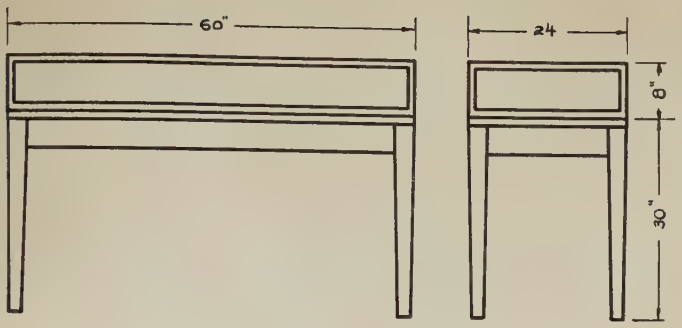
FINISH

The best stain for any wood part is generally considered to be warm walnut brown with a dull finish. Light gray and blue-gray are also much in use, but conspicuous colors are in bad taste and black is advocated by few. Shiny finishes are invariably bad.

Steel is enameled usually gray or green. Bronze is finished in gun-metal, statuary bronze or natural bronze. The last bears a close resemblance to the finest velvet finish on wood and is favored generally.

THE PROBLEM OF COST

The principal difficulty in the selection of cases is usually not one of design but of cost, and it is a very real difficulty to the small museum. Any museum cases which may be purchased are so expensive that a substantial outlay is necessary to furnish even one exhibition room with them. Therefore many museums are forced to choose between buying second-hand cases and making their own. The former alternative is the simpler, but the supply of used museum cases is limited and therefore hundreds of cases that have seen service on candy counters and in jewelry stores are now to be found in museums. Without exception these makeshifts are unspeakably bad. It is better policy to use equipment funds for the purchase



A.—TABLE CASE OF SIZE PROPOSED AS STANDARD.

Courtesy of Library Bureau Division, Rand Kardex Corporation.

B.—TABLE CASE WITH METAL FRAME AND WOOD LEG BASE.

of a very inadequate number of good cases than to provide ample exhibition space in unsightly ones. A sound beginning is likely to be followed by healthy development, but initial progress in the wrong direction is usually difficult, if not impossible, to reverse.

Some museums construct their cases. The larger institutions have their own shops, but small museums usually call upon local carpenters or cabinet makers for the work.

In order to assist in the production of very cheap cases without too great sacrifice of standards, the following notes are appended. If a number of museums would make or purchase cases cooperatively, substantial savings could be affected.

NOTES ON CASE MAKING

Cases should never be built-in or attached permanently to the walls or floors. An exhibition space which is free of all fixed obstructions is the most desirable, because it can be arranged and rearranged as occasion may require.

The sizes given on page 200 are recommended. As material, either oak or whitewood is good; the latter is cheap, workable and takes an attractive finish.

Frame

Plates 15 and 16 show construction of the frame. The required special moldings may be run off at the mill. They need not be heavier than indicated since rigidity of glass and not stoutness of wood members gives the needed strength. Putty should not be used to hold panes of glass as in a window sash, but instead, wood strips fastened with brads, as shown, are employed. However, putty spread thinly between the glass and the *outside* edge

of the frame is effective in sealing the joint and holding the glass against slippage. If the joinery is done by an amateur, joints may be nailed without doweling.

Sashes which are removable may be held in place by screws. For convenience in lifting a sash after it has been unscrewed, detachable metal handles which engage lugs countersunk in the frame at two sides may be provided.

Anyone with a screwdriver can unfasten a screwed sash, but the weight of the glass makes its removal difficult without the handles. Therefore wall cases and center cases are rarely invaded by thieves, but table cases, being smaller, are in danger of being robbed if they contain valuable material. The best fastening for such a case is that afforded by lugs along one edge of the removable top sash and a bar lock along the opposite edge. The lock should engage at two or three points and should be positive acting, not of spring type.

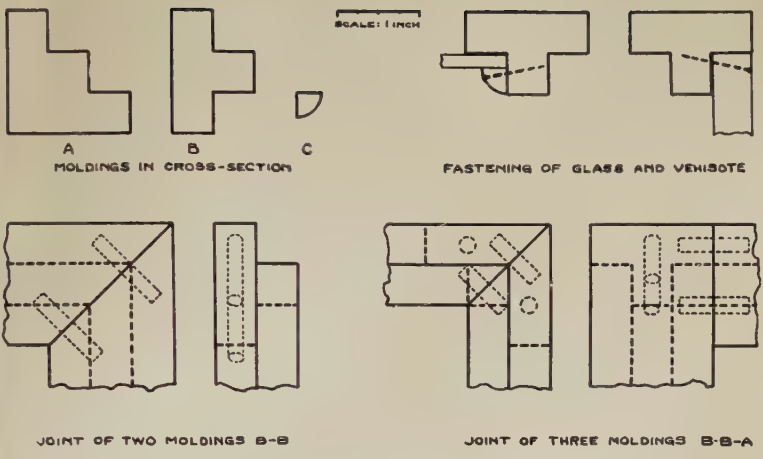
Back and Deck

The backs of wall cases and the bottoms, or decks, of all cases may be made of ½-inch *vehisote*—a composition board that does not warp, shrink or swell. The accompanying drawings show construction. It is important that the deck be raised on cleats as indicated, because otherwise a false bottom may be required to bring objects up into full view. For proper display of small objects, false bottoms or backs may be necessary in any event.

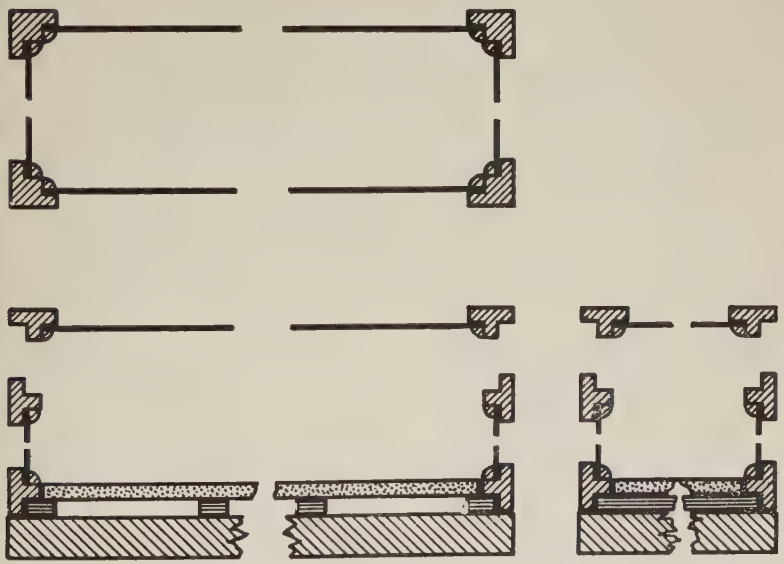
Case linings are discussed in the chapter on installation —page 217.

Base

A solid base may be either plain or panelled, and it should have a 4-inch toeboard all around. Slate is the



A.—MOLDINGS AND JOINTS FOR WOOD CASE FRAME.



B.—SECTIONAL PLAN AND ELEVATIONS OF TABLE CASE WITH WOOD FRAME.

usual material for this board, but a dark finished wood strip may be substituted, and when marred it may be taken off and refinished. A leg base should have square legs, preferably tapered, joined by a 4-inch top rail and surmounted by a plain top. For best appearance the base would naturally be slightly larger in plan than the frame which it supports, but the ledge so formed would catch dust. Therefore frame and base should be flush.

Directly to the top of the base are attached the ½-inch wood cleats shown in the sectional drawings. These support the vehisote deck and also provide securement for the frame.

Friction glides should be provided for all bases.

Glass

Plate glass is used in all factory-made cases and should be specified as "¼ inch American polished plate, selected glazing quality, white and free from bubbles, scratches and other imperfections." For all cases this glass should be used if possible, but under extreme pressure of economy double thick window glass is sometimes substituted. This material is fairly good and costs less than one third as much. The saving to be effected by this choice is substantial, since the cost of glass contributes in large measure to the price of a case. Window glass comes in six grades: three qualities, B, A and AA of each of two thicknesses, ST (single thick) and DT (double thick). The best grade is the AA DT. It is quite clear and free from blemishes, 1/9 inch thick and is made in various sizes of three shapes, namely: up to 30 by 90 inches, up to 38 by 86 inches and up to 60 by 70 inches.

Frosted glass is used commonly for the tops of wall cases.

Shelf Supports

If shelves are to be used in wall cases, supports must be provided. A narrow metal pilaster strip in each corner with short adjustable brackets[1] is both neat and effective. If shelves sag under load, they may be held in the middle by adjustable vertical props inserted between shelves—the lowest shelf being so supported from the bottom of the case and each successive shelf supporting the one above it.

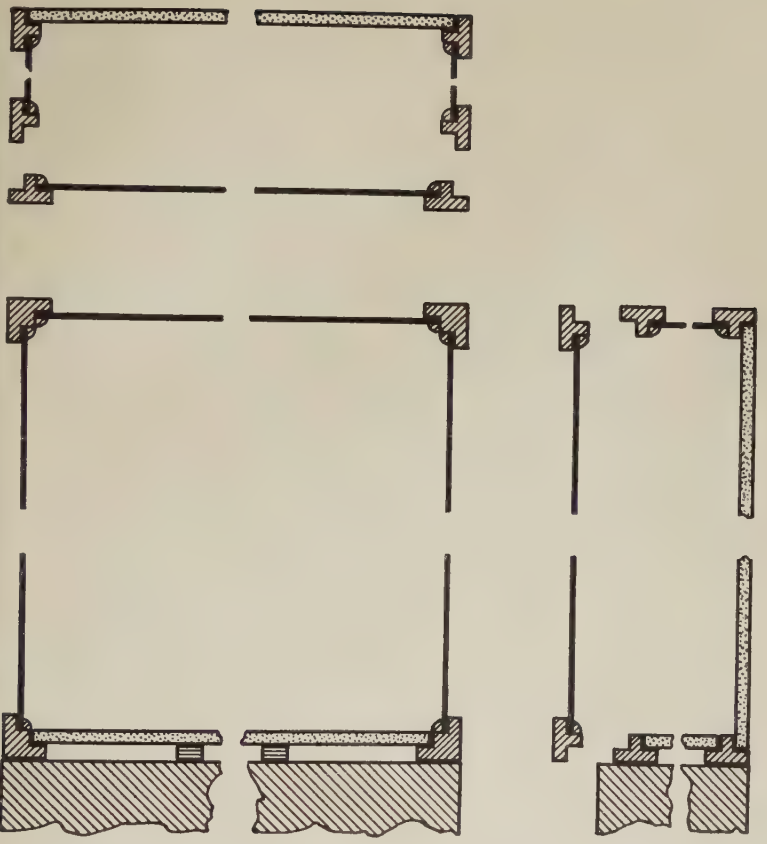
Ventilation

Unless means are taken to prevent it, dust-laden air is drawn into a case through cracks whenever the temperature drops, and before the air is wheezed out again under pressure of expansion, the dust settles inside the case. To filter incoming air, cases on the market are fitted with fibrous packing in the joints, but in a shop-made case it is simpler to provide one or two ½ inch "breathing holes" through the frame or base in an inconspicuous position but where they may be reached easily from the outside to be packed with cotton. Cylindrical metal ventilators are used for large special cases as described in the chapter on groups—page 236.

Lighting

If a case is to be individually lighted, the incandescent lamps should be above the case and outside it, and should be shielded. Lamps, if placed inside a case, must be housed in a ventilated compartment that can be opened from the outside. This of course involves special construction, and is not recommended.

[1] A good device of this sort is manufactured by the Garden City Plating and Manufacturing Company, Chicago. The standard, which is ⅞ inch wide, is No. K-73 and the bracket, No. A-73.



SECTIONAL PLAN AND ELEVATIONS OF WALL CASE. FOR CENTER CASE THE VEHISOTE BACK IS REPLACED BY A SASH AS AT FRONT.

EXHIBITION SCREENS

A screen is used in exhibition to provide a plain vertical surface. It may be glazed to protect flat objects such as laces or pressed plants, or it may be without glass and serve only as attachment and background for material. In a sense, a screen is a very specialized vertical case.

A *wall screen* is one that is hung flat against the wall like a picture. It may be simply a framed rectangle of ¼ inch composition board of any kind.

A *swinging screen* is one that is hinged along one of its vertical edges. Such screens are intended to be installed in series along a wall or around a pillar or other support, so that they may be turned like the leaves of a book. Sizes much in use are 24 by 18 inches, 28 by 22 inches, 34 by 30 inches and 42 by 26 inches.

In order to make both sides of a swinging screen available for exhibition, it is usual to adopt a double-faced frame construction—the single panel being insertable through a slot at the top, and bearing a finishing strip attached to its upper edge to close the slot. A less elegant double screen which is cheaper and also more practical in some respects may be made by fastening two thin single-faced wall screens back-to-back. The combined thickness may be reduced to 1 inch if both sides of a single ¼ inch central panel are used, or to 1¼ inches if two panels are provided. The latter arrangement is the better since each panel may be passepartouted to its glass. When the panels are in place, the passepartout is concealed by the frames.

The frames may be held together by a flat metal strip at the top and bottom, as shown in Plate 17. These strips provide means of hinging the screen to a wall or other support. The cleat shown in cross-section at A is to prevent accidental unhinging. On a wall, the screens

of an entire row may be held by a single cleat, but around a pillar or other curved surface, individual fastenings must be contrived. A simple device is shown at B.

A *floor screen* is one that stands alone on the floor—supported by two or three cross-feet. It is larger than either of the other types and may conveniently be the same size as the back of the standard wall case—that is, 84 by 60 inches.

Vehisote, the material of which panels for screens of any kind are usually made, is of pleasing color and texture for exhibition, but if a fabric background is desired, the material used may be the same as that chosen for case lining—page 217.

REFERENCES—

Drawings and measurements of furniture used by the museum. New York, Metropolitan Museum of Art, 1923, 40 pp.

Gilman, Benjamin Ives. Museum fatigue. Scientific Monthly, Jan. 1916, 2:62–78.

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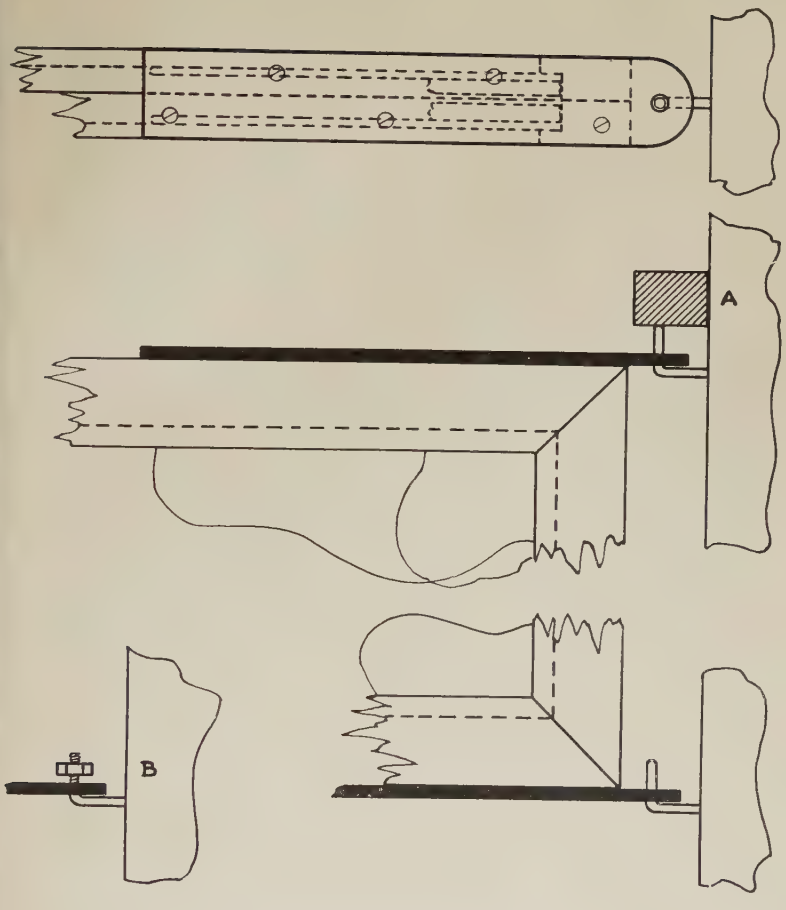
Rowe, Louis Earle. The MacLean case. Proc. Amer. Ass'n. Museums 1916, 10:89–92.



SIMPLE MOUNTING FOR SWINGING SCREENS.

XXXVI

INSTALLATION OF EXHIBITS

THE term *installation*, as employed in museum parlance to denote the process of placing objects on exhibition, comprehends everything from the decoration of an exhibition room and the layout of its contents, to the smallest detail in the placement of any single object. Largely upon mode of installation depends the effectiveness of an exhibit.

An installation may be made with either or both of two purposes in view: the first, to present objects pleasingly to the eye; the second, to utilize objects as means of conveying information. Since a work of art is created to make its own appeal most art exhibits are installed with the first purpose largely in view, as evidenced by tasteful arrangement, adjusted lighting and studied color scheme, as well as by absence of conspicuous labeling. On the other hand, an object of history or science is incapable of telling more than a very small part of its story, and therefore most exhibits on these subjects are installed with the second purpose chiefly in mind, as indicated by systematic arrangement, full labeling and use of diagrams, charts and other means of visualizing ideas.

However, objects of art are interpretable, and also materials of history and science have some power of direct appeal in their own ways. Therefore both purposes—to display and to explain—may enter somewhat into the installation of every exhibit, the one or the other outweighing in such degree as the character of the objects and the purpose of the exhibit may demand.

For example, a number of mammal skulls may be installed with every attention to instructive possibilities. One of the skulls may be sectioned and marked to indicate its various bones. The others may be arranged to show classification of the mammals which they represent, and each skull may be labeled to explain the peculiarities of structure which help to determine the zoological position of the animal. Tapes leading from the skulls may join in such a way as to form a family tree, disclosing that structures betray ancestry. A cord may connect each skull with a spot in a geologic chart which marks the era of family origin. Such devices are capable of giving information, but if the case be drab and poorly lighted, and the objects crudely arrayed on obtrusive shelves, the exhibit is likely to go uninspected. If, on the contrary, the case be well lighted and have a pleasing background, and if the objects be arranged tastefully and fastened to the case-back, then the exhibit is apt to catch the eye and lead the visitor to discover how marvelous bone structures are and to wonder what the similarities and the differences between the skulls may mean. The devices of exposition then have opportunity to do their work. Up to a point where it distracts attention, therefore, the aesthetic element contributes to instruction.

With history exhibits, also, instruction is principally in view, but there is reason for relying upon attractiveness of display to assist them in conveying their messages.

An exhibit of art presents the converse situation, inasmuch as tastefulness of installation is of primary importance, and teaching devices are employed with restraint lest they be distractive. For this reason schematic arrangement is not commonly employed, and labeling is carried out in a special way. This last subject is taken up in another chapter—page 224.

Although these *usual* purposes ordinarily determine the

character of an exhibit of any kind, they do not invariably do so. Thus, materials of science may be shown primarily as objects of natural beauty or impressiveness, and art objects may be displayed only to be expounded. It would be perfectly reasonable, for example, to install a number of paintings with diagrams, tapes and labels to bring out facts about technique, composition or art history, and perhaps to some extent to act as guides to art appreciation. In short, the purpose of an exhibit, quite as much as the character of the material of which it is composed, dictates the type of installation.

A better understanding of the full range of possibilities in installation would be helpful to every museum worker. This is the idea suggested by the often quoted plea for "more science in art museums and more art in science museums." This statement, by the way, is more expressive than exact—the real need being for *more attractive installation of science exhibits and more instructive installation of art exhibits.*

ELEMENTS OF DESIGN

The principles of design should be observed in any attempt either to please the eye or to convey information by means of an exhibit. These principles—these laws of order—are based upon observation of human responses to various kinds of arrangement. The responses may be in the nature of approval or disapproval, or they may be motor reactions such as movement of the eye along paths in a design, or fixation of gaze upon a point. There are many unexplored possibilities of applying the principles of design to museum work, but even the most obvious applications are so commonly ignored that the matter need not be looked upon as entirely abstruse.

The three major qualities of a good design are *harmony*,

balance and *rhythm*. Harmony is secured in any unit of exhibition space, whether it be a case or a room, by adjustment of parts to the whole. There should be unity of idea, form and color. This does not call for dull monotony; there may be contrast and variety if points of contrast are coincident with points of interest and variety is employed to separate the natural divisions of an exhibit rather than to chop it up illogically. Therefore harmony goes hand-in-hand with *dominance* and its antithesis, *subordination*, by means of which judgments as to relative values may be expressed.

Balance depends upon more than symmetry of arrangement; it is secured only when the placing of objects composing a group is judged with reference to individual importance, size, color and any other characters which give "weight." An object of greater weight must be nearer to a center or axis than one of lesser weight if the two are to balance. For the sake of harmony, a center of balance may be coincident with a center of interest—the latter being determined often by the location of a point of brightness or contrast. The well-known appeal of odd numbers of objects in a series is explained in part by the readiness with which a definite and obvious center may be established among them.

Rhythm is the quality of life in a design; it is movement and throb. In a design of similar units rhythm is secured by even spacing, suggesting periodicity. If units of two or three kinds are involved, uniform alternation gives the same result, and if all the units of a series are unlike, progressive arrangement by size or some other characteristic gives sweep to the whole. Rhythm is a function of the line or row. The vitality of rhythm is shown by the tendency of the eye to travel along a rhythmic line, and this may be utilized to lead an observer through all the details of a design. The circle and the triangle around

Courtesy of The Metropolitan Museum of Art.

AN EXHIBIT INSTALLED PRIMARILY FOR PLEASING EFFECT.

a focus of interest are effective compositions because the eye is carried around to its starting point and scrutiny tends to be sustained. However, lines or rows radiating from a center of interest may be effective if the center is attractive enough to bring the eye back from the end of one line to the beginning of another. This return of scrutiny to the center is also assisted in a radiate composition by the facts that converging lines lead the eye in the direction of convergence, and crossing lines arrest the eye at the point of intersection. The temptation to make obvious patterns should be overcome. Wheels, crosses, outlines of objects and other ornate effusions are distracting. Parallel lines are bad because they merely cut up an area. This is one important objection to shelves in exhibition cases and especially to continuous lines of shelves in adjacent cases.

To state these principles in general terms is perhaps to make their application seem involved and detached from ordinary experience. In fact, however, the powers of various arrangements is a matter of common observation. For a fuller discussion of the subject reference is made to Chapter 3 of Ernest A. Batchelder's *Design in Theory and Practice.*

Color as well as form is a factor in design, and therefore understanding of the relations between colors is essential to the securing of harmony, balance and rhythm. The best brief exposition of color is believed to be Chapter 4 of Charles De Garmo and Leon Loyal Winslow's *Essentials of Design.*

SETTINGS FOR EXHIBITS

The preparation of a room for exhibition purposes is primarily a matter of its decoration and equipment in accordance with general requirements. This is taken up in the chapter on interior and equipment—page 317. In

addition there are possibilities of adapting each room to its contents; the importance of making such individual settings is overlooked in many instances. The simplest kind of setting is provided by appropriate wall color, suggestive ornament and attuned light. This is about as far as one can go unless a room contains only closely related material, in which case the opportunities are many.[1]

FLOOR LAYOUT

In a museum with a number of rooms, the first consideration in layout is that of the size of room in relation to the bulk of objects which it is to contain. Sculpture must have space; paintings need more room than prints; lace requires an intimate environment. Similar diverse demands are made by the materials of history and science. In a small museum this problem ordinarily resolves itself into one of space apportionment within a room, since few small museums have rooms in variety.

In making the first outline of an exhibit, the subject-matter should be separated into its main divisions, and each branch assigned to an alcove, a corner, a wall space or a floor area according to its importance and the nature and quantity of material available. Relationships between subjects should be recognized in order that the visitor may find a proper sequence of interests as he proceeds around a room and from one room to another—keeping always to the right. If practicable the layout should be such that a person may see all of the exhibits by following an obvious route which does not double back or cross upon itself. The advantages of this provision are felt most when visitors attend in numbers.

[1] Ways in which problems of setting may be solved at very small cost are suggested by: Blair, Dorothy. A suggestive setting. Museum Work, March-April 1924, 6: 195 and MacLean, J. Arthur. Creating atmosphere in a gallery. Museum Work, July–Aug. 1923, 6: 59–60.

Fixed partitions, as lines of demarcation between the branches of an exhibit, are rarely necessary. If alcoves are required they may be formed by screens or wall cases back-to-back, set off from the wall at intervals. The flexibility preserved in this way is advantageous. Every exhibit should be developed with an eye to the possibility of making successive shifts as more space is required.

Table cases, center cases or large masses in the middle of a room may serve to define a route around them, but no floor should be filled with high cases. Tightly packed rooms are forbidding and difficult to police. Open spaces and vistas are cheerful and inviting. It is especially desirable to have an attractive exhibit at the end of every vista, such for example as that afforded by the length of a room or a corridor. Such features please the eye at a distance and may attract visitors to less striking but equally important exhibits which occupy lateral positions.

PLACEMENT OF CASES

Exhibition cases should not be built-in or attached permanently to the floor. However final a layout may seem, time invariably brings occasion to modify it.

Arrangement of cases and screens is governed by three considerations: light, reflections and general appearance. The first two present interrelated problems which may be difficult to solve except by trial. Inflexible rules cannot and should not be laid down for placement, but in general, assuming light from high windows at both sides as recommended in the chapter on buildings—page 309—units give good effect if placed as follows:

WALL CASES—crosswise of the room to avoid reflections and near either side-wall to avoid obstructing the center of the floor. If not thrown into shadow, they may be

edged *against* either side-wall. A row of wall cases placed in this position by twos—back to back—may be used to form shallow alcoves.

CENTER CASES—crosswise of the room and at any distance from the wall which permits inspection from all four sides.

TABLE CASES—crosswise and preferably near the long axis of the room to avoid reflections.

FLOOR SCREENS—standing off from side-walls to form alcoves, or lengthwise of the room on its long axis.

PLACEMENT OF OBJECTS

Unless objects are placed so that one may see them without stooping, craning or contorting, visitors suffer from so-called *museum fatigue*. The design of cases is an important factor. Wall cases with low bases and high tops, and table cases with high or wide decks are undesirable.

But even in the most approved cases, installations are likely to be trying to eyes and muscles unless precautions are taken to place objects correctly. The visitor is supposed to be standing when he observes closely; the museum which permits him to sit down—except to recover, or perhaps to view large objects at a distance—has yet to make its appearance. The eye-height of the average adult is 60 inches. For ordinary inspection the eye should not be more than 18 inches from its object. This defines a zone between the 42-inch and the 78-inch levels for vertical installation of small objects. But this zone is too high for children, among whom there is wide range of stature. Perhaps the best plan is to install small objects and labels between the 40 inch and the 60 inch levels. At higher or lower levels large objects may be viewed with comfort.

INSTALLATION IN CASES

Case Lining

The opaque decks and backs of cases against which objects are viewed are usually covered with fabric. This improves appearances and may also provide a surface which is very little damaged by screws, nails and pins. For the latter purpose a coarse cloth is best. Burlap wall coverings and monk's cloth are much in use, but cheaper materials such as cotton crash, unbleached muslin and even cheese cloth are also employed. Burlap is too coarse as a background for small objects.

For general purposes a natural straw color or gray is preferred, but dull uniformity throughout a museum is to be avoided. Case lining of the same color as the wall covering of an exhibition room is sometimes used, but in any event it should be subdued in tone and should not clash with surroundings. A coat of dark green or cherry stain on case back or deck, under the lining, improves the color—especially with thin material such as cheese cloth.

For special purposes velvet lining is sometimes employed. Lace, for instance, shows very well against this material, but a dead black background commonly made by painting the wood of the case is not pleasing. Case lining is usually fastened with gimp tacks.

False Backs and Bottoms

The depth of a wall case may be decreased by the use of a false back, and that of a table case, by a false bottom. These are shallow trays with ¼-inch vehisote bottoms and covering of case lining fabric. They are not necessary, but they may serve either of two purposes: to bring objects closer to the eye or to facilitate changing of the contents of a case. One museum makes temporary exhibits by covering permanent installations with false

backs upon which the new material has been installed.

Center cases are quite often equipped with pyramidal false bottoms which provide a series of steps upon which small objects may be placed. This is not recommended. The arrangement is wasteful of space and subversive of the proper use of center cases, which is to accommodate large objects.

Shelves

Although shelves are sometimes used in center cases, the shelf problem is essentially one of the wall case. The present tendency is to do away entirely with shelves of any kind and to attach objects directly to the vertical surface, but if shelves are to be used they should be rather narrow and those at the top should be narrower than those at the bottom. Ordinarily the greatest height at which a shelf should be placed is five feet.

There is difference of opinion as to the relative merits of wood and glass shelves. Wood, which is used in $\frac{7}{8}$ inch thickness, is somewhat bulky in appearance and throws shadows, whereas glass, being only $\frac{1}{4}$ inch thick and transparent, does not have these disadvantages. On the other hand, if covered with case lining material, wood provides a pleasing background for objects, whereas glass offers some distraction by permitting one to see through it. Furthermore, glass breaks easily, may require support at the middle and does not offer enough friction to prevent objects from jarring out of place. On the whole, therefore, wooden shelves are favored. If the forward edge of each shelf is beveled on the under-side the appearance is improved.

Vertical Installation without Shelves

A vast majority of objects shown in cases are capable of being attached directly to a vertical case back. In-

Courtesy of Museum of Natural History, University of Illinois.

AN EXHIBIT INSTALLED PRIMARILY TO CONVEY INFORMATION.

stallation in this fashion requires a little ingenuity, but it has advantages which far outweigh any difficulties of technique. Against the pleasing background of case lining, in full view and arranged in tasteful design, objects appear at their best when so installed.

Wire, brads, screws, screw-eyes or hooks ordinarily suffice to attach objects, but the Shrosbree hanger[1] is very useful. This consists of a flat metal strip bent into an L, one leg of which is perforated for attachment to an object and the other of which slips into a small flat socket screwed to the case. These hangers are made by the Milwaukee Public Museum which writes: "We have on hand a supply of the Shrosbree specimen hangers in four sizes. Inasmuch as we have the sets of dies, from which they are stamped, it is very likely that when our present supply is exhausted we shall have more made. We have been selling them to institutions at prices to cover the cost of stamping and handling. The present prices are as follows:

No. 1 size (small)	$1.75 per 100 sets
2 "	2.00 " " "
3 "	2.50 " " "
4 " (large)	3.75 " " "

To purchasers who have not used them before, we send a blue-print giving instructions for use."

Wax-and-balsam[2] is an exceedingly useful composition for attaching labels to objects or to case backs, and for holding light objects in place. It is made by adding 1 teaspoonful of Canada balsam to 1 ounce of melted bee's wax. It should be cast into little lumps or a chunk from

[1] Ward, Henry L. The Shrosbree specimen hanger. Proc. Amer. Ass'n. Museums, 1910, 4: 13–16.

[2] Clowes, Herbert. Tackless labeling for exhibition purposes. Proc. Amer. Ass'n. Museums, 1915, 9: 111–113.

which radish-sized lumps may be cut. The wax must be of the best quality free from commercial adulterants such as paraffin, tallow, stearin or other introduced oils or fats, and care must be taken to keep it clean. A tiny piece of this composition, warmed by working between the fingers for a moment and pressed between any two surfaces, causes them to adhere. It holds indefinitely but also releases easily without leaving a mark or grease spot.

Bases for individual objects, whether they be on shelves or attached to a vertical surface, are not much used except for certain science specimens which require underpinning. For such objects naturalistic bases have supplanted the polished wood supports which were once so common. A bird may be perched on a twig or branch; a mammal on a clod of sanded plaster or maché over wire-mesh. Some invertebrate animals may be mounted to advantage on similar bases, or on leaves or bits of bark.

Pinned insects may be set on white slabs made by cutting paper-covered compressed cork[1] into rectangles, which are then edged with buff or brown passepartout. Plants and many other objects may be shown on rectangles of cardboard or composition board.

Fossils, rocks and minerals are usually laid on the bottoms of table cases, but a new method of mounting them for vertical installation has recently come into use. A wire or wire nail, cemented to the object,[2] is passed through a hole in a small slab of board and clinched. The slab may be installed vertically; the common practice of arranging such mounts in long rows supported by metal strips is to be discouraged.

[1] Compressed cork is sold by the Armstrong Cork Company, 50 Church Street, New York City.

[2] Reeds, Chester A. Mounting geological specimens with sulphur. Museum Work, Nov. 1920, 3: 62–65.

If lines are desired to divide an exhibition surface into areas or to connect objects, buff curtain cord may be used. The ends of each piece should be knotted tightly and may be held by a buff celluloid-headed thumb tack.

Horizontal Installation

Many of the devices employed in vertical installation are useful for table cases also, but usually horizontal installation is of the simplest, objects being laid directly on the fabric-lined deck of the case. The use of cardboard trays is almost obsolete.

INSTALLATION WITHOUT CASES

If an object, which ordinarily would be shown in a case, is replaceable, it may be cheaper to replace it from time to time than to carry the investment in a case to guard it. Many objects must be protected from dust, handling and theft, but many others such as are usually encased do not need to be so guarded. The interests of posterity demand a far less rigorous and strait-laced policy than some museums have adopted in their exhibition rooms. Furthermore, the interests of effective exhibition suffer from the over-use of glass. *Tactile* education is quite as important as visual education. The tray-topped table is more useful than the exhibition case for many objects—and it is far less expensive. If there is danger of theft or misplacement, objects may be wired fast.

WALL INSTALLATION

Objects of many kinds besides pictures may be shown directly against the wall. With this type of installation the temptation to crowd is quite as strong as with any other, and it is just as much to be condemned. More

than a single line of objects, unless they be small ones, detracts from the effectiveness of an exhibit. For small material wall screens are useful and they are especially convenient because of the ease with which they may be rearranged or replaced by others with new installations.

Pictures may be hung, each with two parallel wires, from a molding—see page 318—or supported by two tenter hooks or Moore hangers driven into the wall behind the frame. If the wall surface permits, the latter method would seem to be preferable, although there are advocates of wires on the ground that a mass should have a visible support. If hangings of large pictures are to be changed often, wires are better because, otherwise, in course of time the wall is scarred by the heavy hooks or nails.

Prints may be installed against a wall or screen, each one covered by a rectangle of glass which is supported by two screw hooks below and one at each side, above center.

REFERENCES—

Many short articles such as those cited in footnotes of this chapter are to be found in the PROCEEDINGS OF THE AMERICAN ASSOCIATION OF MUSEUMS and MUSEUM WORK. A complete index to these two serials has been issued as PUBLICATIONS OF THE AMERICAN ASSOCIATION OF MUSEUMS. *New Series*, No. 2, 1927. THE MUSEUMS JOURNAL, published by the Museums Association of Great Britain, is also a fruitful source of information.

XXXVII

LABELING

Museum labels are designed to convey information, and as devices for instruction they are essential to any exhibit which is educational in purpose. It might be anticipated, therefore, that labeling of history and science exhibits would be admittedly important and relatively unquestioned as to character, whereas labeling of art exhibits would be under some discussion. And so it is. The difficulty with art arises from three facts: first, that many people take only an intellectual interest in art exhibits even though the sole purpose of installation may be to afford aesthetic pleasure, second, that informative labeling does not assist in the appreciation of an exhibit and third, that labels are distracting for those who desire to enjoy the aesthetic qualities of a work.

The first point is well brought out by a writer who indicates his interest in knowing, apart from enjoying. He tells of a visit to a museum with a friend: "This art museum contained a collection of pottery said to be the largest and finest of its kind in existence, and as fairly intelligent visitors we wished to know something about it. What did we learn? Nothing. Here and there was a label bearing a date; here and there one bearing a name, presumably that of some locality, although the names were all strange, and in the absence of a map they might possibly have been the names of the makers. As to the objects of the collection, whether the jars were made for use, for ornament, or for sale; what were the finest or rarest glazes; wherein the work of one maker differed from that of another—as to this we learned absolutely

nothing." Such inquisitive interest as this is universal and there is no justification for ignoring it.

The other two points which have been stated bear upon the worse-than-uselessness of the informative label to the visitor who is bent on appreciation. To devise a way of reconciling these difficulties is the problem of labeling art exhibits. The best solution seems to be that of using inconspicuous labels, each bearing only a few words, and of gathering together the real label texts into a so-called *gallery leaflet*. The leaflet, which is nothing but a concession to appearance, is not used in connection with art installations which are instructive in purpose or with history or science exhibits.

THE TAG

The unobtrusive label used for an art exhibit may be designated as a *tag*, since it is not strictly a museum label. Usually it gives the artist's name, the date, school, name of donor and perhaps other information to assist in identifying the object. It may bear a number, but numbers *alone* are not sufficient in a permanent exhibit.

The format of a tag is determined largely by its location. It should tone in with its background. Thus, gilt tags on gilt frames or buff ones on a burlap-covered wall are appropriate.

THE LEAFLET

There is difference of opinion as to what may properly be stated in a leaflet. Some maintain that information about the artist and historic facts about his work are all that can be given. Others believe that there is reason as well as opportunity to say in addition something about artistic qualities, in the hope of opening the visitor's eyes and thus leading the way to appreciation. That

art appreciation can be induced by word of mouth is admitted; why the same end should not be attempted in writing is hard to understand, unless the difficulty lies in unwillingness of the museum worker to make written statements on subjects which are open to a great deal of discussion. In any event, the text should be arranged so that it bears the closest possible relation to the exhibits. A rambling account or one that touches only here and there upon the exhibits is of little use. A bald list articulating with objects by numbers is equally bad. A combination of general statement with descriptive listing is probably most satisfactory.

The format of the leaflet is a matter of taste. If it is printed, the standards suggested in the chapter on publications—page 271—may be followed. However, many leaflets are only mimeographed.

Being labels for the public, leaflets should be obtainable for use without charge. In fact, a number of leaflets should be available for simultaneous reading. These should not be confused with the printed guides which large museums offer for sale. Most of the latter are souvenir booklets or general texts and are not intended to take the place of labels.

THE LABEL

The museum label is a unique affair designed to serve a very definite purpose. It is a silent instructor—always ready to draw attention to an exhibit and to make comments at the exact moment when they are desired. There is no stereotyped formula for labels, but, as a matter of fact, efforts at label-writing have discovered very few methods of presentation, and most of these are obviously bad. There remains a form of label which may be looked upon as typical. It consists of three parts: *text*, preceded by a *heading* and followed by *notes*.

Text

The text gives instruction by two stages. First, it satisfies curiosity by answering inevitable questions, and second, it offers general information. In other words *the text proceeds from the specific to the general.* This order of presentation is based upon the fundamental museum principle that observation comes first and explanation afterward. The visitor sees an object, is moved to inspect it, asks himself a commonplace question about it, consults the label, gets his answer and becomes further interested, reads the label to a finish and draws an idea from it, looks at neighboring objects to round out the idea, arrives at an understanding of what the exhibit is for and ends with a desire to get a book on the subject. The converse procedure would be to begin with labels —reading them in sequence and, after finishing each one, looking at the object which illustrates it. These would be bookish tactics. If they were sound for museums, labels would have to begin with general statements, proceed to explanatory detail and finish with references to objects on exhibition. In short, they would be deductive. But museums invariably employ the inductive method by virtue of the fact that their teaching is based upon observation. Therefore, labels are written after the inductive manner—first giving the facts and then drawing the conclusions.

The introductory paragraphs of text, which are designed to answer questions, should tell what the object is, where it comes from and briefly what it does or is used for. The obvious is not stated; this would discourage observation. If possible, familiar words and non-technical names are used, but many times this cannot be done, as in the case of an animal or plant which has no common name. In any event, technical names may be added parenthetically for the benefit of those who want them.

The paragraphs which follow the introductory statements should, in effect, explain why the object is displayed. There should always be such a reason. An exhibit without a purpose cannot be labeled except in detailed statements identifying objects. Many installations are poorly labeled because they are without purpose and therefore cannot be labeled.

If the concluding sentences of a label are written with a view to persuading the visitor to do something about what he has learned, the label attains to greatest usefulness. The simplest expedient is to allude to other parts of the exhibit so that inspection will be extended. If the subject is interestingly presented, reference to a book which is to be found at a nearby reading table may be effective. In some instances self expression beyond the moment may be induced. For example, the suggestion may be made to the visitor that he watch in every-day life for something that relates to the exhibit, or that he imitate some process in order to understand it.

Every label should read smoothly. Short sentences are good, but the diction ought not to be jerky. To employ a simple literary style is better than to hitch unrelated sentences together as they might appear in a scrap book.

Heading

Ordinarily the heading of a label is the name of the object or group of objects. It summarizes the opening sentence, answering the question: *What is it?*

There is another kind of heading which is not common but which deserves consideration. It takes the form of a sentence stating some interesting fact in anticipation of the text. Its purpose is to catch the eye of the visitor in the hope of arousing his interest and causing him to observe the exhibit. Then the usual process ensues:

questions are suggested and to find answers the visitor reads the first part of the label. If it is well written, he is then lured into reading further. It is evident therefore that the *statement-heading* is not at all comparable to the *name-heading*.

Notes

Notes, which appear in smaller type at the bottom of a label, are occasional necessary evils. They credit the donor of an object or name the preparator of an important model or group.

Individual and Collective Labels

Some labels are not complete in themselves, but contribute to the labeling of an exhibit as a whole. For example, related objects may each be labeled with its name only—the texts being brought together into one collective label. This is merely equivalent to splitting the heading into several coordinate headings on separate small cards.

In turn, several collective labels may come under a still more general label applying to an entire case or an alcove, and finally an entire room may have one general label. It is interesting to note that according to the *observe-first-read-afterward* logic, the more general labels are equivalent to the closing portions, or conclusions, of less general ones and therefore are supposed to be read later. To be sure, a person approaching an exhibit is likely to see the most general label first, but this is only a preliminary view. The real inquiry begins with inspection of objects, continues with reading of individual and then collective labels, and ends with a final look at the general label. Knowledge of this sequence is helpful in writing labels.

Incidentally, a general label may be brief and take the form of the *name heading* on an individual label, but this is a similarity in appearance only. If it bears no more than the words *The Earth's Crust* or the question *What is the Earth's Crust?* it implies a statement—a conclusion from an entire exhibit. The short form is probably more useful than a full statement, because, while its purpose is to generalize from individual labels, the general label also acts as a curiosity-awakener for the visitor who might pass by if his interest were not challenged by large type and few words.

FORMAT OF LABELS

The size of a museum label is determined by the size and importance of the object or case to which it relates as well as the length of the text and the generality of the subject it treats. It is desirable to adopt a series of standard formats so that all labels of the same size and degree of importance may be of similar appearance.

The usual label material is cardboard, which, according to the best printing standards, should be white, but which is usually gray or buff to harmonize better with case lining and to prevent fading. If a dark stock is desired for reasons of appearance, the danger of illegibility should be kept in mind. A card that takes ink well should always be chosen. Royal Worcester is a good buff board that is gaining in popularity and Falcon Photo-Mount Tea Board is a satisfactory brownish gray material. Colored stocks are not favored.

Museums may have difficulty in getting label board, even in quantity from wholesale dealers. This is due to reluctance to sell direct to the consumer—a point of ethics in the trade which may be met by ordering through a retail stationer.

The type in which lables are set should be uniform throughout a museum, and should be chosen with care. De Vinne is much used. Caslon is dignified but for small labels it is somewhat too light in face. Gothic is better. For most labels 14 point is about right, but for general labels a larger type is desirable. Black ink should be used always.

Hand-written and typewritten labels are preferable to none, but printed labels are used by most museums. A small hand press and one or two fonts of type may be purchased for less than $100 and will serve admirably. It is difficult, if not impossible, to get proper labels made by a trade printer; by printing at the museum the inevitable small problems may be solved as they arise.

It is customary to print four copies of each label: one on board for immediate use, two on board for reserve and one on white paper for pasting in a record book.

INSTALLATION OF LABELS

Since labels are made to be read, it is important to install them where they can be seen—not in shadow, behind objects or flat on shelves above the eye. With the aid of wax-and-balsam composition described in the last chapter—page 219—small labels may be attached to objects, case backs or shelves as desired. Various patent clips for standing labels on edge are not satisfactory. The simplest device is a little block of wood fastened to the back of the label with the composition.

Large labels are usually edged with buff or brown passepartout against a backing of compo-board. This provides for attaching them by Shrosbree hangers to the inside of a case at any desired angle. Labels outside cases are covered with glass. If framed, they should first be passepartouted with the glass.

Labels are often combined with diagrams or maps. Diagrams are drawn beside the text after printing but a map outline may be printed from a zinc plate and coloring or other detail added by hand.

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XXXVIII

MUSEUM GROUPS

A GROUP is an installation of related objects or models with realistic setting. In most highly developed form, it is a sort of stage-effect enclosed in a specially lighted case and viewed through a window. The scene may be an interior or an outdoor one, and it may be shown in a foot cube or a space as large as a room. This type of exhibit was evolved partly in reaction to the once universal method of installing museum objects in close formation on shelves. The group represented an effort to make museums interesting to lay-visitors by resort to dramatization, and doubtless it offers the most successful way of conveying information about the manner of life of man or beast. As an object of interest and beauty a group is attractive, and as a vivid portrayal it is profoundly impressive.

Subjects of science or history are commonly presented in this way. Groups of mounted birds or mammals posed among wax plants and other artificial accessories before scenic backgrounds are to be found in most science museums. The size of such groups is usually determined by the size of the animals which are featured—most groups containing only three or four individuals. History or ethnology groups with life-sized human figures are also common, but the difficulty and cost of constructing large groups of this kind has led to the development of miniatures.

Miniature groups, with small wax figures on a scale of ½ inch or 1 inch to the foot, are especially useful to small museums, and there is reason to believe that in

Courtesy of American Red Cross Museum.

SMALL GROUP WITH INDIVIDUAL FLOOR CASE.

the future they will be much more widely used. Although the only subjects which have been treated extensively in such groups are those requiring human figures, doubtless the time will come when miniature mammal groups will find favor; the larger mammals lend themselves admirably to representation. Naturally, small models do not have as much force as mounted skins. The majesty of the elk can be shown only by a huge group, if in truth it can be shown at all, but many facts about the habits of the elk can be told by a well-designed miniature. Such a little group is worthy as an exhibit, and it may represent a better investment of funds—all things considered—than an ambitious venture in taxidermy.

Various degrees of simplification are practiced in the making of groups, whether large or small. The background may be only a neutral tinted screen; accessories in the foreground may be few and simple; there may be no artificial light. Many groups are installed in ordinary center cases and are viewed from three or all four sides. Some groups have no cases. If accessories are simple and strong and if the animal to be shown is common and can withstand some dusting and fingering, such an open group is good economy. Furthermore, absence of glass is always commendable for its influence upon the visitor.

SMALL GROUP CONSTRUCTION

Every group should be a good picture as well as a truthful representation. For a clear recital of principles of composition a useful book is Henry R. Poore's *Pictorial Composition*. In order to arrive at pleasing results a preparator should make color sketches and also, perhaps, a clay sketch-model of his group before starting on the final work. If such preliminary studies are discussed with several people from the standpoints of accuracy and artistic qualities, serious blunders may be avoided.

The following general suggestions apply to small groups —whether on full scale or in miniature.

Foreground

The foreground of a group is the part made in three dimensions; in a sense it is the group itself, since other elements exist only for the purpose of setting it off. Usually the foreground is made on a separate base designed to rest on the floor of the case and to fit snugly all around. If it is held in place only by a concealed cleat at each side, it may be taken out after removing the front of the case. In groups that have the foreground joined visibly to the background, the latter must also be supported on the base.

The transition from the solids of the foreground to the plane of the background is not necessarily difficult to make even in landscape groups. The method just alluded to is the one which is least successful. It requires that the foreground be curved up at the rear and merged into the background. Since a junction of this kind has the effect of bending the landscape into an obtuse angle, it is desirable to choose a scene which shows a depression or gully crossing it in the middle distance so that the illusion may be lost in a natural feature of the landscape. If both foreground and background represent a stretch of uninterrupted plane, the horizontal should be joined to the vertical by a very wide curve.

A simple and effective way of relating the foreground to the background is by leaving a gap between them—the background simply extending down out of sight. An effect of distance is gained by this arrangement, which is particularly suitable for hill-top, tree-top or cliff scenes, but which may be employed even for level ground if a rock, log or other obstruction is introduced at the rear of the foreground.

Courtesy of The American Museum of Natural History.

A.—SMALL GROUP WITH PORTABLE CASE FOR EXHIBITION OR LENDING.

Courtesy of Natural History Museum, San Diego.

B.—GROUPS INSTALLED IN SERIES.

A foreground which is actually horizontal appears almost invariably to slope away, so that to *seem* level it must really slant upward towards the background. The exact grade required in any particular group can be determined only by trial, but a rise of one in ten is usually about right. Even a celluloid sheet used to represent the surface of water should be inclined. If the setting is a room, the floor should be tilted and the walls should slant inward towards the rear. Another aid to foreshortening is to use at the front accessories and figures that are slightly larger than those at the back.

Accessories, or the objects in the foreground other than the figures, may be made of wax, celluloid, plaster, papier maché, paper, cardboard, wood or other material. They are usually overdone and much time and money is wasted in the process. A group, like a picture, should *suggest;* detail may defeat its purpose.

Foliage is especially difficult to make. For full-scale groups, commercially-made artificial [1] foliage may be used in many instances. It is very much cheaper than the product of the museum preparator and some of it is better also. If desired, the leaves may be improved by retouching with color. For miniature foliage various weeds dried and colored are excellent.

Background

The background of a group may be either transparent or opaque; that is, it may be a photographic transparency or a photographic or painted picture. For most purposes an opaque picture is the better, since it does not necessarily require special lighting. Enlarged colored photographs give excellent results if detail is required to be

[1] Foliage of common trees and many wild flowers may be purchased from Frank Netschert Company, 61 Barclay Street, or the Decorative Plant Company, 228 Fifth Avenue, both of New York City.

shown, but for most purposes the painted background, which is adaptable under a wider range of treatment, is believed to be better.

Depending upon the character of a group, the background may be either a flat screen, a cylindrical surface covering the sides as well as the back, or a somewhat cup-shaped surface covering the top also. Best results may be secured in most cases by using a cylindrical background which extends well up out of sight of the observer. This is for open-air scenes, of course. An excellent material is *congoleum* cork carpet or similar floor covering, which does not wrinkle like canvas, requires no stretching, has good texture and may be painted flat and later bent into any required curve.

Case

A small group may be installed in a carrying-case which, to be exhibited, needs only to be set on a bracket or table, or it may be housed in a relatively large cabinet which rests on the floor. Sometimes several groups are encased side by side.

Since the average eye-height of the adult visitor is 60 inches, the top of the window through which a group is seen should not be lower than this. Children may be accommodated by placing a low box or step in front of each group.

It is essential that a group be protected from dust. This may be accomplished by the double expedient of providing a dust-tight case and making provision for it to "breathe" by inserting in one of its walls a cotton-plugged ventilating cylinder to filter air which gains ingress when the temperature drops. For large groups the cylinder should be 2 inches or more in diameter, but for a small group a ½-inch hole is adequate. Such ventilation is desirable for any group, but it is essential to one

Courtesy of The Cleveland Museum of Art.

A.—PRIMITIVE TRADE—A SMALL GROUP BY DWIGHT FRANKLIN.

Courtesy of Milwaukee Public Museum.

B.—THE COTTON FIELD—ANOTHER GROUP WITH MINIATURE FIGURES.

which is artificially lighted and therefore is subject to recurrent heating and cooling.

Lighting

Artificial light adds immeasurably to the effectiveness of a group. In fact, the most striking of groups are those which depend primarily upon tints secured with colored glass, shadows, high lights and other effects of illumination. If the economy is necessary, a button, to be pushed when the exhibit is viewed, may be provided.

For small groups, the best incandescent lamps are those with candelabra base which are designed to be wired in an ordinary house circuit. The light-box, in which they are housed, should be separate from the interior of the group, and the light should pass through concealed windows at the top or sides. Light-boxes must be easily accessible so that bulbs may be replaced, and they should have free ventilation to prevent overheating.

Illuminated groups show to best advantage in a darkened room, and for this reason they lend themselves especially well to hallways and dark nooks.

GROUPINGS AND PERIOD ROOMS

Any assemblage of objects in natural grouping is essentially a museum group. The objects may be a fine table, a ceramic, a picture and a rug brought together in a corner, or perhaps an assortment of old cooking utensils arranged about a Colonial fireplace. Such groupings are the rudiments of so-called *period rooms*—rooms or alcoves each furnished throughout with objects of a period. Such a room may be a *document* in that it contains objects which were actually used together, and even the woodwork and walls may be authentic reconstructions. On the other hand, a period room may be an *example* in

that it contains objects which are all of like provenience and might conceivably have been found together.

There are many unexplored possibilities for art museums in the use of cases with special backgrounds and lighting for exhibition of objects or groupings which gain beauty and meaning if shown in suggestive setting.

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Courtesy of Oakland Public Museum.

COLONIAL KITCHEN—A PERIOD ROOM.

FOURTH PART

EDUCATIONAL WORK

XXXIX

THE MUSEUM AT WORK

Collections and exhibits are parts of a museum's equipment, and the use made of them measures the wisdom of acquiring them and providing for their safety. Collecting and preserving are very necessary functions, but they are not ends in themselves.

Most museums render public service—whether indirectly through research or directly through education. The latter seems to be the more fruitful line of effort for a small museum, and energies which are put forth in such work are well spent. In fact, it has been asserted that museums "are able to give more, hour for hour, than any one of the great universities." When the educational function is discharged others are not apt to be neglected, since the work requires background that can be supplied only by a well-rounded program, and invariably it enlists support, both moral and financial, for an institution that maintains it.

RELATIONS WITH SPECIAL GROUPS

Projects laid out on clearly defined lines to meet the needs of specific groups of people ordinarily make up a large part of an educational program. The people may be young or old. Of the former class are the children who present themselves at the portals of any museum which undertakes to cater to child-interests. School classes form other groups, and coteries of adults with special interests make up the balance of the clientele. To the problems of dealing with these various circles, following chapters are devoted.

Relations of art museums to designers, producers and distributors of industrial art have been under much discussion during recent years, but no great progress seems to have been made toward increasing the usefulness of museums in this direction except at certain of the larger institutions. It is doubtful whether the work of most small museums can develop far in this direction. For exhaustive treatments of the subject, reference may be made to books by Charles R. Richards: *Art in industry* (1922) and *Industrial art and the museum* (1927)—both published by the Macmillan Company.

RELATIONS WITH THE GENERAL PUBLIC

Quite as important as work with special groups is the influence which may be exerted upon the general public through exhibits and information service. The audience is mixed and shifting, and the method is hit-or-miss, but, in the aggregate, results would be astounding if they could be measured. Without doubt, exhibits of fossils and museum publicity did much to prepare the public mind for the recent world-wide discussion of evolution, and this is but one example in one field.

The influence of exhibits upon museum visitors is increased greatly by explanatory remarks. A person whose function is to interpret exhibits by word of mouth is called a *docent*. In some museums docents wander about and cater to casual interest and curiosity. In others they meet parties in the museum either at scheduled times or by special arrangement. In a small museum, the director or members of the curatorial staff are sure to be called upon to act as impromptu docents since limited quarters afford no opportunity for refuge in a remote office. Although a sort of casual docentry is highly desirable and doubtless will always be practiced, there is a wholesome

tendency to curtail the undirected efforts of docents. In fact, even the title *docent* is disappearing and those who give instruction are being designated as *instructors*.

Every museum may render an educational service by giving information in response to inquiries received by letter, telephone and visit. In many cases the help may be very real, as in the case of a farmer who wants an insect pest identified, a decorator who desires to inspect photographs of period furniture or a reporter who seeks material for an article about an early settler.

MISSPENT EFFORT

Some museum officers fall into the error of thinking that it is good to indulge in social affairs for their own sake. To be sure, festive gatherings may occasionally serve useful purposes, since at times important business may be aided by convivial setting. Ordinarily, however, serious work can be carried forward at its face value.

Also it is uneconomical to undertake a great variety of projects and services without regard to the resources at command. After having laid out a comprehensive program it is well to concentrate first upon one project in each of the branches of work. If further restriction of activity is necessary, the range of application of projects may be limited. For example, school-service, which remains to be discussed in detail, may be carried on at first in only one of its two phases, and even this work may be further simplified by rendering service to only one school or to only one teacher. Successful work, even on a small scale, may be counted upon to win approval, whereas ineffective work, however extensive, is likely to be harshly judged.

ADMISSION AND ATTENDANCE

Ideally a museum would be open free from 9 A.M. until

10 P.M. every day of the year, in order that its resources might have fullest opportunity for use. Practically, however, this is not possible, and therefore each museum must determine how long its doors *can* be kept open and on how many days admission can be free. These questions are decided on the basis of facilities for policing and cleaning, cost of artificial light and the need for such small sums as may be derived from admission fees.

If business hours—9 A.M. to 5 P.M.—can be kept on five days of the week, a good impression is made. On Saturdays, most museums observe longer hours than offices, since the afternoon is an opportunity for visitors. Sunday morning is not important but Sunday afternoon is the time of best attendance. Regular evening openings are arranged by some museums, and many others open exhibition rooms on occasions of evening lectures.

Pay-days are sometimes instituted partly on the ground that members, who pay dues, should have the special privilege of free admission now and then. However, there are more museum members who join because they like to be identified with a good work than there are ones who expect to secure a full return. Therefore, the tendency is strongly towards elimination of all pay-days, especially by small museums which are not much used by copyists and art students who might find great advantage in the seclusion which pay-days afford.

The number of visitors depends upon the size of the community as well as the attractiveness of the museum and conditions of admittance. In cities of fewer than fifty thousand inhabitants, where distances of travel are short, attendance should be nearly equal to population. In a few small places, the attendance is several times as great, by reason of the repeated comings of classes. In big cities the numbers of visitors are relatively unimpressive.

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XL

ACTIVITIES FOR CHILDREN

THE children are the most receptive individuals in the community. Upon their minds deep and lasting impressions may be made with relatively little difficulty. It is natural, therefore, that museums should address much effort to this educational opportunity, and from the principles of museum work it is equally natural that they should be concerned less with talented children than with those of average mentality—of predominant type.

There are two groups of children with which a museum may deal most advantageously: children who come to the museum of their own accord, and children at school. Of course, members of the first group are also included in the second, but the two groups are approached under such different conditions that they are treated as though mutually exclusive. This chapter is devoted to activities for the first group, which is a relatively small one.

Although a certain amount of unscheduled instruction may be given to individual children, work is carried on for the most part during so-called *museum hours*. Customarily, a series of hours is arranged for Saturday mornings and, if too many children attend, another series may be added for any convenient afternoon. Only the exceptional instructor can deal with more than perhaps twenty-five girls and boys.

The purpose of the museum hour is to give the children opportunity to see and touch museum material, to observe it closely, to reason from what they see, and to express their conclusions in speech or drawing. For young children, systematic procedure is necessary and, therefore,

the hour divides itself usually into two parts—the one devoted to group discussion, the other to museum games. For older children, instruction resolves itself into the informal work of a class or club.

GROUP DISCUSSION

At the beginning of a museum hour the instructor leads a discussion based upon a few selected museum objects. It is generally agreed that remarks should be entirely commentary upon objects and not in the nature of a talk which the objects illustrate more or less. The temptation on the part of the instructor to do a great deal of talking is so strong that in many instances the work takes the form of a lecture, talk or story. In fact the museum hour is called the *story hour* in many places. However, critical examination of results indicates that the story, though valuable as entertainment to provide emotional background, is ineffective as a method of instruction.[1] The less the instructor talks, the better.

After the introductory discussion has been continued for perhaps half an hour, the group is released to permit the children to extend their observations by examining museum exhibits. In order to organize this phase of the work, the game method is employed extensively.

MUSEUM GAMES

A great many museum games have been devised but all of them are problems requiring examination of exhibits for solution. Part of a solution may be contained in a label, but observation and independent thought as well as label-reading should be induced. The following game is typical.

[1] Studies made in the Educational Department, The Cleveland Museum of Art.

BIRD GAME NO. 1[1]

1. The cow bird usually lays its eggs in _____
2. Six bird enemies are _____
3. A king fisher captures its prey with its bill, so its _____ are small.
4. A _____ has pointed tail feathers to prop itself against the tree trunk.
5. The smallest egg is laid by _____ the largest by _____
6. An owl has very soft feathers; these help it to fly _____ at night.
7. It is hard to see the green heron in the woods. Its _____ look like branches and its _____ imitate the color of leaves and shadows.
8. The red poll and snow bunting are winter birds. It would be harder to see the _____ against the snow, while the _____ would not easily be seen among weeds.

A game may be printed or mimeographed on a sheet of which each child receives a copy. When one is finished correctly, another is begun. These activities require very little supervision and are instructive and fascinating. For very young children it is helpful to print each question on a separate slip or card so that sustained independent work is not required. The following are further examples, numbered for this form of presentation.[2]

1. _____ is the stem of a grass-like plant which grows in Asia. It grows to be very tall

[1] Prepared by the Buffalo Museum of Science.
[2] Prepared by The Children's Museum of Boston.

Courtesy of Buffalo Museum of Science.

A MUSEUM GAME IN PROGRESS.

and large. The wood is used in many ways by the people who live where it grows.

109. _____ shells were once used for money in Africa.

157. Can you read what is written on the Egyptian pupil's slate?

The difficulty of a game may be suited to the age of the players. Some advanced games are based upon an entire session of museum instruction—including a talk and a period of observation.

CLASSES OR CLUBS

The casual relations which are established with children who attend museum hours may be developed in some cases—especially among the older boys and girls. To provide for more serious interest, classes are organized. One museum calls its classes *Hobby Clubs* and arranges for election of officers and related features which are attractive though incidental. There may be as many clubs as there are major interests among the children—an art club, stamp and coin club, history club, bird club, flower club, mineral club and many others. In order not to over-organize, however, it is best to have few clubs each devoted to a general subject. Some of the children may join several of the groups in succession

For each group it is customary to lay out definite work amounting to a simple course of study. One may be given opportunity to draw and color under such guidance that a basis is laid for appreciation of art. Others are led in laboratory work or study of history or science collections. Walks or field excursions may also be arranged. Such work is only one step removed from some of the activities in which Boy Scouts, Girl Scouts, Camp Fire

Girls and Wood Crafters regularly engage, and in consequence these organizations may sometimes be drawn to the museum.

A new method of conducting field work in nature study on the project basis is that of making a *nature trail* along which plants and other natural features are labeled.[1]

CREDIT FOR WORK

In order to give visible purpose to the work of classes, it is helpful to set up standards of attainment and to offer rewards. A fair example of the practice is given by the following statement:

> Opportunity is now given for children to work at the Museum[2] in eight different subjects represented by the collections. A student may begin work at his convenience and spend as much time as he pleases on any course. Completion of each course entitles him to a certificate of credits which count toward a medal. A bronze medal is awarded for 50 credits and a silver medal for 100 credits.
>
> Courses may be chosen in any order. Certificates that count toward a bronze medal are decorated with a bronze border. After a student has earned the bronze medal, his credits count toward a silver medal and he receives silver bordered certificates.
>
> The courses are as follows:

Subject	Value of Credits
Animal Study	20
Aquarium Study	10
Insect Study	15

[1] This plan is fully explained in: Lutz, Frank E. Nature trails. See reference on page 139.

[2] The Brooklyn Children's Museum.

Bird Study	15
Mineral Study	10
Botany	10
History	10
Geography	10

At the completion of each course, an examination is offered. The following syllabus of requirements for a certificate indicates the scope of one of the courses as well as the character of the test.

REQUIREMENTS FOR THE CERTIFICATE IN BOTANY

I. Understand the structure of flowering plants:

1. Learn the parts of a flower and the use of each part. Draw the parts of a flower.
2. Name all of the parts in each model of a flower in the Botany Collection. Give the name of the family represented by each model.
3. Find pictures in books in the Library to illustrate how plants are fertilized by insects.
4. Study models of the root tips and tree trunk and draw them, labeling each part and telling what it does for the plant.
5. Study the models of the seedlings of monocotyledons and dicotyledons. Draw and label an example of each.
6. Make a list of the different stems in the Botany Collection and tell what kind of work each does.
7. Make a list of the types of leaves in the Botany Collection and make a labeled drawing of each one.
8. Write in your note book the name of every living flower you see in the Museum.

II. Study non-flowering plants:

1. Find in the Library, pictures and descriptions which will help you to understand the life histories of algae, mosses, mushrooms, ferns and conifers.

2. Make labeled drawings of a moss plant, a mushroom and a fern frond.

III. Study trees:

1. Draw twigs of horse chestnut, labeling bud scales, leaf scars, lenticels and annual rings.

2. Learn to recognize all the twigs on the flower table and draw examples of
   (a) Opposite buds (c) leaf buds
   (b) Alternate buds (d) flower buds

3. Make a list of 40 trees that you have learned to recognize by
   (a) outline (c) bark (e) leaves
   (b) branching (d) twigs (f) flowers

4. Make a list of the different species of trees that you see on the way from your home to your school; your home to the Museum.

5. Read in the Library on the following subjects and keep a list of the references you use.
   The big trees of California
   Forest reservations in the United States
   The value of forests in regulating rainfall
   The value of forests in preventing floods
   The value of trees to city people
   The enemies of trees

IV. Make a labeled collection of

25 twigs of trees 25 seeds and fruits
25 leaves 25 flowering weeds

V. Write a composition of 500 to 1,000 words on your favorite subject in Botany.

VI. Write a report of the plants you have found most interesting in your trips to the Botanic Garden and Greenhouse.

Credit may be given for all children's work and not just for study courses, as indicated by the following rules:

CREDIT SYSTEM

All young people working for the Diploma or Medal of the Buffalo Museum of Science will be awarded the following credits upon the completion of the work required:

20 units must be earned for the Diploma and 30 units for the Medal.

All young people obtaining the medal will receive in addition a membership card that will make them members of the Museum until they are 21 years of age.

Perfect attendance at the Story Hours	3 units
Perfect attendance at the Sunday Lectures of the Roosevelt Field Club	2 units
Completion of each of 6 series of Games	1 unit
Completion of all the games—an extra	3 units
Completion of each of 3 study courses	2 units

A Brown Certificate represents 1 unit; a Blue Certificate 2 units; and a White Certificate, 3 units.

Besides reward in the forms indicated above, successful accomplishment may also be recognized by giving a child responsibility of which it may be proud, and which also stimulates continuance of the interest. Several museums appoint the graduates of study courses to the position of

Junior Docent, and each appointee has the privilege of acting as a docent to the general public on certain occasions. These little instructors learn as much in their efforts to teach others as they do in their regular preparation.

Some of the examples given in this chapter are taken from the practice of large museums but many very small museums carry on exactly the same kinds of work. In fact, museums in small communities have more chance of doing work that is commensurate with the need than those in large cities.

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MAGOON, EVA WATERMAN. Children's clubs in connection with museums. Museum Work, Nov. 1918, 1: 49–55.

SLOCUM, ANNA D. A study of nations through the museum. Proc. Amer. Ass'n. Museums, 1916, 10: 34–35 (Introductory paper of a symposium).

VAUGHAN, AGNES L. The background of history. Proc. Amer. Ass'n. Museums, 1914, 8: 33–39 (Introductory paper of a symposium).

_____. Do museum instructors teach appreciation or merely facts? Museum Work, Feb. 1919, 1: 144–148.

XLI

SCHOOL-SERVICE

In its efforts to reach children, a museum naturally looks to the place where children gather—the school. This can be said also of the supporters of every cause or "ism," but here the likeness ends since museums establish their relations with schools by offering unique assistance, not by proposing new subject-matter for the curriculum. After decades of experimentation, the school-service of museums has taken form as two distinct lines of work, both of which make use of museum collections and call upon the special knowledge possessed by museum workers. The two parts of the service are:

Lending of Illustrative Material to the School—to give the teacher objects of her own selection for use as aids in the regular work of the classroom.

Instruction of Classes at the Museum—to give the children opportunity to broaden their experience beyond the horizons of the classroom, the home and the street.

In this chapter, the work is discussed only as it applies to elementary schools, but by extension of the same principles the services may be rendered to high schools also. In fact, it is sometimes found expeditious to begin school-service at the top and, by degrees, to extend it downward through the grades.

LENDING OF ILLUSTRATIVE MATERIAL

Geography, nature study and art are rarely if ever taught in the schools without the use of illustrative material of some kind, and a number of other subjects—most

notably history and composition—may be presented better with visual aids than without. Pictures are much utilized because they are everywhere available, easy to handle and durable. Objects, which in most cases are better than pictures for classroom work, are not much used because they are difficult to get and many are easily damaged. However, objects are the stock-in-trade of museums, and the lending of them to teachers is an important part of museum educational work.

The material which is used for school-service is the same as that already described in the chapter on the lending collection—page 140. In fact, school-service is the chief reason for existence of the lending collection.

It is essential to success of the service that demand for it come from the teachers, even though at first no more than one classroom is supplied. Beginnings may be constructive—however humble for reasons of small demand or scant resources. Also it is imperative that teachers get the material which they want at the time when they need it; the aim of the service is to assist teachers *in their regular scheduled work*. To this end a printed or mimeographed catalog of the collection should be available to teachers on request, and order-slips should also be supplied.

Material may be conveyed to schools and back by messenger or by automobile. In a small city it is sometimes possible to have several school boys appointed as messengers for each school, but it is better that deliveries be made by an employee of the museum. One small institution has purchased a car with dollar contributions made for the purpose, and the director herself mobilizes the lending collection. If long distances must be covered the service usually has to be limited, but infrequent deliveries are better than none. Several museums which have extended the service to schools of the county have secured substantial county appropriations in return.

Loans are usually made for a period of only one week. This short term has the advantage of prompting immediate use of the material which otherwise might be laid aside and forgotten. A simple system is one that requires the messenger to make one round of the schools each week —always on the same day—delivering material ordered a week earlier, collecting what has been used during the week and taking up order-slips for deliveries on the next visit. This requires that teachers anticipate their wants, but orders are usually accepted by telephone or mail for needs discovered after the messenger has left. New material should not be lent until old has been returned.

Experience shows that it is not wise to *give* material to schools, since collections developed in schools usually do not have full use or proper care.

INSTRUCTION OF CLASSES AT MUSEUM

A single school class does not ordinarily visit a museum more than once or twice a year, and therefore such instruction as it receives must be designed to accomplish its purpose in a short time. Since the aim is to broaden the child's experience beyond the usual horizons, the work must be general in character. The chief value of the visit lies in the opportunity to become acquainted with museum material at first hand, and this opportunity is afforded by group discussion followed by museum games. These methods are discussed in the foregoing chapter—page 247.

In some museums, numbers of classes are brought together and given an illustrated lecture followed by a tour of exhibition rooms. This represents an attempt to extend instruction to large numbers of children, but it is not a method which museums in small communities are called upon to adopt.

Subjects which are to be treated should be chosen with reference to the grades of visiting classes, and the series of lessons which any class receives during its eight successive school years may be planned so that it constitutes a sort of course. For a general museum, it would be ideal if each class of each school could make three visits annually, so that there might be one lesson in history, one in science and one in art each year. Such satisfactory arrangements are rarely possible, but if definite subject matter is assigned for each grade, and records are kept for each class, a symmetrical plan can be developed as work progresses. At best, the instruction is of the hit-or-miss variety—seed being scattered broadcast, so to speak, in the knowledge that enough of it will take root to repay the effort.

The sympathy and cooperation of school authorities is essential to full success of school-service. In order to insure good attendance and to have the work taken seriously both by teachers and pupils, visits should be made during school hours, and, if practicable, on a schedule laid out at the beginning of the term or school year. A plan of cooperation which is regarded as the best practice yet developed, provides that the schools assign a teacher to carry on instruction at the museum. The teacher is customarily chosen by the museum director, and she works under his supervision, although her salary is paid by the school department. In some museums several teachers are so assigned, but a small institution should be able to carry out its program with the aid of one person on full or part time.

If the schools are not entirely sympathetic, a museum may address itself to the teachers individually. A form letter explaining school-service, sent to each teacher at the opening of school, may be expected to result in some visits, but a personal approach to a few teachers is much

better. From service rendered effectively to only one or two classrooms, extension of the work usually follows naturally. If funds are limited, this type of beginning is the best to elicit the necessary additional support.

In large cities there are transportation problems which are solved usually by providing busses or special trolley cars, at the expense of the museum or the school as the case may be. In most small communities such difficulties are not encountered.

REFERENCES—

The principles of school service are discussed in references given in the foregoing chapter. Catalogs of illustrative material are listed in references following the chapter on the lending collection—page 146.

XLII

ADULT EDUCATION

DURING recent years there has been a continuous increase of interest in the education of persons who are past school age. Correspondence schools have shown extraordinary growth, universities have established extension departments, libraries have offered reading courses, social and vocational organizations have developed class work of one sort or another and in many other quarters efforts are afoot which indicate appreciation of the importance of such work. Quite recently a new tendency has appeared—the inclination to take stock of what is being done, in the hope of determining upon lines of effort that are most successful and of formulating plans by which adult education in any community may be carried on in its several aspects by coordinated effort. Museums have long concerned themselves with adult education and it is to be anticipated that they will hold an important place in any newly developed scheme of community service.

All of this is coming about at the instigation of persons who seek educational advantages and not at the urging of those who offer them. In fact adult education has been defined by Keppel[1] as "the process of learning, on the initiative of the individual, seriously and consecutively undertaken as a supplement to some primary occupation."

The element of *consecutive* work is stressed advisedly. "What nationally we lack the most, as I see it, is the habit—and in most communities the opportunity as well—of consecutive study in some subject for its own sake

[1] Keppel, Frederick P. Education for adults. The Yale Review, April 1926, 15: 417–434.

—history, literature, science, the fine arts, what you will—not to fill the pay envelope, directly or indirectly, but to develop in the student what experience has proved to be one of the most durable satisfactions of human life." The weight which must be attached to this assertion is sufficient to overbalance a good deal that has been taken for granted in museum circles, and one is tempted to think that perhaps the most significant activity of museums in this field is consecutive class instruction—a type of work which is relatively undeveloped. This suggests that perhaps museums may be able to offer, in conjunction with library reading courses, the one essential which such courses lack, namely, opportunity for discussion. Under the guidance of museum staff members or of peripatetic leaders, museum classes, following library reading courses illustrated by museum material, may become important factors in adult education of the future.

However, up to the present, museums have been concerned not so much with small groups as with populations. They have worked on the principle that educational efforts scattered broadcast may be counted upon to raise the general level of culture in a community. Methods have been developed accordingly. The three most generally adopted instruments, in probable order of importance, are the newspaper, the exhibit and the lecture.

Doubtless the most potent of all agencies for influencing the people is the newspaper. It is read by almost every one; it is trusted implicitly by many; it is regular and tireless in its hammerings at public opinion. With respect to the press, museums are strategically situated since the information which every museum worker has at command is suitable material for news print, and even museum objects may be presented to the eye after a fashion by printed pictures. Stories from history, art

and science—many of them illustrated—are written by museum staff-members and by associated students, collectors and amateur specialists. Newspaper correspondents and free-lance writers also use much museum material that is put at their disposal, and editors usually look favorably upon such copy because it contains no personal propaganda.

Exhibits doubtless hold second place to publicity in point of effectiveness, because they reach smaller audiences and make only occasional impressions upon any individual. Installations are not prepared especially for purposes of adult education, of course, but regular museum exhibits have a real influence in this direction. Permanent displays make a somewhat limited impression upon large numbers of people; temporary exhibits are probably more impressive but they reach small audiences as a rule. It is difficult to say which kind is the more important.

Lectures also have a share in educational work for adults since most museums conduct series of lectures during the winter. If there are funds to pay fees, professional lecturers are brought from out-of-town, but this is not necessary; many courses are run with local speakers who donate their services, and museum workers who exchange engagements. Lectures which are delivered in a museum auditorium may be open to the public or they may be for members of the museum only. Lectures given at schools or other community centers are customarily free to the public and are likely to be quite far-reaching in their influence.

The Buffalo Museum of Science has developed a service which has not as yet been taken up by other museums, but which has proven so successful that there is little doubt of its more general adoption in the course of time. The service consists of lending a projection lantern, a set of slides and a written lecture to anyone who can

furnish proper credentials. These sets are taken home by the citizens of Buffalo and lectures are run off for members and friends of some thirty families every night. The Museum has a long list of subjects from which to choose and the number of lectures and slide-sets is being increased. If means could be found to start this service in other cities, through cooperation which the Museum would gladly give, there would doubtless be rapid extension of the plan. Even a single lantern moving about through the homes of a small community would be of much benefit in the long run.

There are many other ways in which museums assist is the education of adults—almost every branch of work having greater or less effect—but the important methods are those enumerated. Educational publicity, exhibits and lectures are within reach of every museum, and perhaps the future will witness development of the beginnings that have already been made in offering consecutive work for individuals and small groups.

XLIII

THE MUSEUM LIBRARY

EVERY museum requires a reference library for the use of its staff and the public, but ordinarily it does not need a large collection. If non-essential books are secured in any number, the primary purpose of the library is sure to be defeated by the very labor of caring for it, and furthermore the museum may, by inadvertence, usurp a part of the domain of the local public library. However, a few hundred reference works on subjects covered by a museum should constitute a valuable addition to the educational resources of any community—an addition that is not likely to be made available except through the instrumentality of a museum.

There is relatively little occasion to extend the library beyond bounds in the fields of art and science, but in that of history a temptation is presented by newspapers, annals, archives and other printed records as well as unpublished documents and manuscripts. Such matter is valuable, and, out of a sense of responsibility for its preservation, a museum is apt to overburden itself with duties of the caretaker. The proper custodian for these records is the local historical society, and, as suggested in the chapter on cooperating organizations, museums should establish such relations with historical societies that there may be free give-and-take of material between them. With reasonable understanding between the historical society, the library and the museum in any community, the various local library problems should find ready solution.

BOOK SELECTION

The most practical way to develop a small library is to secure books only as they are needed, beginning with a few general works that have good bibliographies. When these books are inadequate new ones may be selected from the references which they contain, and these will suggest others in turn. The appended references include titles that will be found useful as points of departure.

For the use of museum staff members, it is advantageous to secure the more important publications on museum methods. The bibliographies of this Manual furnish a key to this literature.

CLASSIFICATION

The Decimal Classification of Melvil Dewey and the Library of Congress Classification—the D. C. and the L. C., as they are termed in library parlance—are the two systems in most general use, and both of them are employed by museums. The Decimal Classification, which is published in book form,[1] has a notation of numbers divided decimally without limit. It is used more than all other classifications combined and is especially suited to the needs of public libraries. The Library of Congress Classification, which is published as manuscript by the Government Printing Office,[2] is of more recent origin. It is quite flexible, has a relatively compact notation of letters and numbers, and, largely on account of these merits, it is favored for college libraries and very large libraries—both of which cover their fields intensively. A special advantage to the user of this classification is that of being able to purchase printed catalog cards from the Library of Congress. These cards, which bear sub-

[1] See reference at end of chapter.
[2] See reference at end of chapter.

ject headings and L. C. call numbers, make possible a substantial saving of time in classifying and cataloging.

For a small museum which does not propose ever to have a large book collection, the Decimal Classification is doubtless preferable. It is stable and, though not ideal, is shown by long experience to be practical. Its use assures uniformity of practice between the local public library and the museum, and this should be a stimulus to coordinative action and an accommodation to the public.

Many museums which use the Decimal Classification have devised their own modifications of the established captions. Such original or partly original systems are not believed to be entirely advantageous since they violate the mnemonic feature of the Classification which is so helpful both to librarian and user, and also render the printed index more or less unserviceable. However, if adaptations are to be made, the variant meanings should be marked by a distinctive notation—preferably by introducing letters as suggested in the Introduction to *Decimal Classification.* It would add greatly to the general advantage if authors of all adaptations would communicate with Dorcas Fellows, Library of Congress, Washington, D. C., who is editor of *Decimal Classification*, and who is interested in having the system developed in observance of its established principles.

For a museum which has or intends to develop a *large* collection of books on either history, art or science, the Library of Congress Classification is probably the more satisfactory. It is in use in a number of museums of history, and is advocated strongly. For the science museum, it is favored by those who have made comparative studies of the two systems. However, for a large collection of books on art, apparently neither of the systems is ideal, since several museums and art reference

libraries have devised classifications of their own. The best known is that of The Metropolitan Museum of Art.[1]

The technique of caring for a small reference collection of books may be learned with the help of any librarian, but it is highly desirable that a museum librarian have at least the professional library training afforded by a summer course at one of the universities which offer such instruction. Every librarian should be a member of the American Library Association, Chicago, in order to keep in touch with the library world.

REFERENCES—

GARDINER, ELIZABETH M. The library of the smaller museum. Proc. Amer. Ass'n. Museums, 1910, 4: 78–84.

Book Lists

Books for the college art library. The Art Bulletin. (Published by the College Art Association of America), Sept. 1920, 3: 5–60.

Bibliographies in the following works are also useful as book lists for the library of a museum of art.

The significance of the fine arts. Published under the direction of the committee on education of the American Institution of Architects. Marshall, Jones Company, Boston, 1923.

REINACH, S. Apollo: an illustrated manual of the history of art throughout the ages. New York, Charles Scribner's Sons, 1924.

Works cited in the text of the chapter on the history collections and exhibits—page 158—contain bibliographies for the history librarian. For the science librarian a book list is in preparation by Agnes L. Pollard, curator of the Staten Island Public Museum, New York City.

[1] See reference that follows.

Classification

DEWEY, MELVIL. Decimal classification and relative index. Lake Placid Club, Adirondacks, N. Y., Forest Press, Edition 11, 1922, 988 pp. Edition 12 is in press.

Library of Congress. Classification: outline scheme of classes, Washington, Government Printing Office, 1926, 25 pp.

PENNELL, ETHEL A., and WALLACE, LUCIE E. Classification systems used in the library. New York, Metropolitan Museum of Art, 1911, 148 pp.

XLIV

PUBLICATIONS

For purposes not subserved by the newspaper and other printed media through which its messages occasionally find outlet, a museum may issue publications of its own. In this way a special clientele can be reached with certainty, and the copy may take any form that is desired. Large museums publish extensively, but smaller ones are hampered seriously by the high cost of printing, and must confine themselves to essential publications, printed modestly and economically. Most useful are annual reports, bulletins and occasional leaflets—all popular in character. Technical papers presenting the results of research may be contributed to established national journals, and material that is not acceptable to them may be put on record in a way that is explained in the chapter on research—page 293.

THE ANNUAL REPORT

An annual report is an accounting for stewardship. It is useful in stimulating interest, securing new members and raising funds. Customarily it takes the form of a communication from the president of the museum to the members. The president contributes a brief introductory statement which leads up to reports of the director and of the treasurer. The director's report embraces any reports of curators. The whole account should be as brief as possible. It should be restrained, not boastful, and it should never beg for money. However, a form of gift or bequest may be printed at the end of the treasurer's

report by way of suggestion and to show the exact corporate title. A list of officers, trustees and staff members should appear, and a roll of members of the museum may be included. Lists of donors and accessions are usually long and tiresome, and these, as well as the roll of members, may be omitted if economy is important.

Some museums print their articles of incorporation, constitution and by-laws in each annual report, but it is better to publish these documents as a separate leaflet, since they are seldom changed and need not be reprinted every year.

THE MUSEUM BULLETIN

Popular serials, usually called *bulletins*, are published by many museums and are very useful in holding the interest of members. They give space to announcements and articles about museum activities and collections. Current lists of donors and accessions may appear without being subject to the objection that attaches to such lists for a whole year as they would appear in an annual report. Illustrations add greatly to the attractiveness of a bulletin. A half tone engraving is more expensive than an equal area of ordinary type, but a line cut is usually cheaper. A certain amount of standing matter is always permissible, and may be helpful in keeping down the cost of a bulletin which is reduced in size to the minimum.

A museum bulletin is intended to be read as soon as it is received and therefore it should not be too long. Eight or twelve pages issued monthly are about right, but even four pages quarterly are useful, and this simple form should be within the reach of any museum. However, if a still cheaper format is desired, the bulletin may be mimeographed and the pages stapled together. Several established publications were started in this way.

LEAFLETS

For various special purposes or occasions little folders, or leaflets, may be required. Permanent records, like articles of incorporation, constitution and by-laws, may also be published in this form. One way to circumvent the printing of a special leaflet is to devote a number of the bulletin to the subject in question, and to have extra copies run off for use as leaflets. At slight additional expense such a special number, or a portion of any number of a bulletin, may be reprinted in leaflet format without running heads and other matter that pertains only to the serial. Examples of matter which may be treated in this way are: a schedule of lectures, a catalog of a special exhibition, a catalog of the lending collection, a description of school-service and a campaign leaflet.

FORMAT

Museums stand for refinement and good taste, and should express themselves in good printing. This does not mean expensive printing necessarily, although higher grades of paper and alterations in proof that are sometimes requisite to the best work are expensive, but it does mean judgment in planning and care in supervision. Within the range of control by these means, good printing is no more expensive than poor printing.

Many printers have execrable taste, and some who are very good craftsmen are not to be depended upon for advice in matters of planning. It is essential that anyone who wants good printing be familiar with standards and processes in order to be able to give explicit instructions and to see that they are carried out.

There are so many books, pamphlets and articles on the processes and products of printing that the subject need not be reviewed here. The bibliography lists two

items that apply to museum problems. Suffice it to point out a few rules that are most commonly broken.

Style of type should be selected for legibility, dignity and appropriateness to museum publications. There is a wide range of choice, but Caslon is as good as any. Some museums adopt the same style of type for all work and it becomes a sort of trade-mark, but however this may be, two styles should not be mixed in one piece of work. Different faces—Roman capitals, small capitals, lower case letters, bold face and italics—as well as different sizes of type may be used to secure needed effects of display, emphasis and the like, but mixtures even of different faces of the same style are desirable only within limits. Simplicity should always be sought.

Size of type is stated in *points*. For bulletins, reports and leaflets, 10 point is the smallest that is satisfactory for main text. Short inserts may be in 8 point. For a publication that need not be crowded, and especially one in which an artistic appearance is sought, eleven or twelve point is the usual choice. Capitals of the same size as used in text, or one size larger, are usually large enough for headings. The titles of illustrations are pleasing if set in smaller capitals.

The top margin of a sheet should be narrower than the bottom margin. In the case of two opposite pages, the outer margins of each page should be wider than the inner ones, but not as wide as the two adjacent inner ones combined. In order of decreasing width, the margins of each page should stand as follows: lower, outer, upper, inner. Narrow margins are unsightly.

Any publication from which pages or articles are likely to be torn should have the full reference in the running head. This is accomplished by showing on the left page: page number, name of publication, date; and on the right page: volume and number, name of publication, page

number. Thus any page torn out will bear the date on one side and the volume and number on the other. For the name of the publication on each recto, may be substituted the name of the author or the title of the article on that page.

Proportions of printed masses should conform to proportions of paper. Masses should balance—the center of mass being above the middle of the paper—and blotchy appearance of light and bold faced type should be avoided. All such rules are based on principles of design.

Paper ought to be chosen to suit the character of the printed matter. Half tone illustrations require smooth paper, and fine type calls for smoother paper than display type, but glossy paper as well as bibulous, soft and very rough paper should be avoided for ordinary purposes. There are wide selections of medium-priced stock which have appearance of quality. White paper and black ink make the best combination. Color schemes are prone to be bad.

There are two page sizes which are especially convenient for museum publications: octavo—6 by 9 inches more or less, and pocket folder size—4 by 9 inches. A pocket folder can be enclosed in an ordinary legal envelope and the size is therefore to be recommended for special leaflets. Annual reports and bulletins are best in octavo, and, if they are set in double column, newspaper type can be used as next suggested.

REPRINTING FROM NEWSPAPERS

In order to secure printing for the cost of paper and press work, it is sometimes possible to publish first in a newspaper and then to borrow the type. This plan is useful chiefly for matter that is acceptable to a newspaper in the exact form in which it is desired for reprints.

Otherwise portions may have to be added or deleted and other changes made in type. When copy is offered to a newspaper with reprinting in view, it is a good plan to prepare a lead in news style; after this the desired matter may be run in full. The lead may be discarded in due course and the remainder of the type used. Catalogs of exhibitions, schedules or programs of lectures and even annual reports are sometimes printed in this way.

Reprints may be made on paper similar in texture, but not in quality, to news print because newspaper type does not require a very smooth surface. If a cover or title page is added, the new composition should be in the same style as the borrowed type. This precaution can do much to overcome objections to appearance, but at best the plan is a concession to economy and does not yield really good results.

DISTRIBUTION OF PUBLICATIONS

In addition to the local circulation which all museum publications should have, a limited distribution for permanent record is desirable. Copies of each important item of printed matter should be sent to the Library of Congress, to the state library of the home state, to The American Association of Museums and to museums in the state and others with which exchange relations are maintained.

At least two copies of everything should be placed in the museum's own library at once. Some museums have not complete files of their own publications.

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Dickinson, Harriet E. The care of museum publications. Museum Work, Sept.–Oct. 1921, 4:65–68.

Oswald, John Clyde. Good printing for museums. Museum Work, March–April, 1924, 6: 189–191.

Walter, Frank K. Library printing. Chicago, American Library Association, 1923, 31 pp. (Contains an excellent bibliography.)

XLV

PUBLICITY

THE term *publicity* is sometimes applied to an entire program of museum activities, but more commonly and more aptly it is used to designate the special means by which the work of a museum is kept before the public. Although at times the spoken word is the instrument of communication, generally the written word is more useful. The most effective medium for the written word is the newspaper.

As already pointed out, newspaper publicity is of two kinds, so far as its purpose is concerned. It may aim to make the institution and its work better known, or it may be designed to convey information about history, science or art. In other words, it may be *institutional* or *educational*—though the two kinds are not always mutually exclusive.

INSTITUTIONAL PUBLICITY

The problem of securing institutional publicity is largely one of doing things to give occasion for it. Almost everything that happens or is about to happen is news and can command space if it is presented properly, but there are always the two requirements: news incident and newspaper presentation. A story may be killed or a trivial incident may be given weight by the manner in which it is written up. Therefore a museum director cannot expect to get full returns on publicity effort without having some insight into the technique of newspaper writing. News incidents also are largely under control, for events may be moulded or even brought about especially for the publicity material which they will give.

There is always some feeling that to seek publicity is questionable, and this sentiment is not difficult to understand. Seekers after *personal* publicity are often so assiduous in their efforts and so transparent in their conceits that more modest persons look upon their method as offensive. However, newspaper editors, seeking legitimate news, are quick to discriminate, and as a result there are open doors for cooperation between newspapers and individuals who have legitimate messages for the public. This does not mean that names should be omitted from newspaper stories. The contrary is true, since personalities lend interest, but undue featuring of people is as bad policy as it is bad taste. Right publicity is dignified.

On the other hand some people are diffident about publicity because they fear that their stories will be garbled. Usually this may be prevented by giving written copy instead of interviews, but the unction to embarrassment over any inaccuracies that do creep in, is the fact that most readers never detect such errors and most of those who do, know where to put the blame. After all, the risk of an occasional misrepresentation may be taken cheerfully in return for the invaluable assistance that newspapers can give.

Educational matter may travel as a rider on almost any news story, and the opportunity so afforded adds to the significance of institutional publicity. Stories that bear upon efforts to extend museum service or to secure support are of the utmost importance since success in such matters depends upon general understanding of what museums are for and how they operate.

EDUCATIONAL PUBLICITY

There is far greater opportunity for educational than for institutional publicity, since educational subject matter is inexhaustible and little or no occasion in the way

of news background is needed for its presentation. If an object of some interest is acquired or placed on display by a museum, that fact alone may afford ample introduction for a story. Failing introductory incident, however, many articles may be run on their own merits in special columns, magazine pages or other newspaper features.

Still, news incident may be helpful in getting a story into print, and therefore events are sometimes seized upon or brought about solely for purposes of publicity. A particularly interesting example of this is offered by a practice of The Cleveland Museum of Natural History. A large bulletin board has been erected on the lawn in front of this museum, and on the bulletin curiosity-provoking placards are posted in advance of weekly newspaper articles which explain them.[1] This scheme, which has the double purpose of inducing people to read the articles and of making the articles more attractive to the paper, may be adopted by any museum, and ingenuity will devise others of greater or less merit.

WRITING COPY

A news-story should be about an event—something that has just happened or is about to happen. It states fact, not opinion. It narrates; it does not expound or argue. The first sentence should present the salient fact and should state it news-end foremost. For example: "Five hundred persons visited the Blank Public Museum last Sunday, setting the highest record for the year, according to the report of a count made by the Blank Troop of Boy Scouts," is better than: "According to the report of a count . . ." The balance of the opening paragraph should finish the story so far as its main facts are con-

[1] Madison, Harold L. A pioneer bulletin. Museum Work, Sept.–Oct. 1923, 6: 85–86.

cerned, and the succeeding few paragraphs should round it out without going into detail. Thereafter the necessary space may be taken to add supplementary matter, amplifying as fully as may be appropriate and quoting when convenient. Minor details should be relegated to the end because copy is very likely to be cut by the editor. In fact, by providing several convenient places to cut, the merit of a story is increased.

Adjectives should be used sparingly. The temptation to gush is strong to one who is impressed with the importance of a subject. It is much better to say: "A meeting was held," than, "An important meeting was held." If the meeting is important the reader discovers it from facts that are stated. People like to draw their own conclusions and so editors try to give them bare facts. If a story is about something that is going to happen or has elements of opinion, it may be prepared as a signed statement. The editor may then write introductory paragraphs which make known the fact that such opinions are expressed—which is news—and he can then complete the account by quoting the statement.

A story need not bear a headline; it should never have one for papers in the large cities. At the top of the first sheet should appear the name of the museum and the words "For release on October . . ." All copy should be typed on one side of standard letter-size paper and double spaced.

All of the foregoing comments apply to a *news* story—usually called a release. A feature article is quite a different matter and may be presented at greater length and in the usual essay form.

Although the newspaper is by far the most valuable medium of publicity, other publications are not to be overlooked. School papers, club and association publications, house organs, church bulletins and theatre pro-

grams reach important groups, and it is often possible to get space in them.

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XLVI

CAMPAIGNS

In order quickly to achieve some end which requires public acquiescence, it is customary to resort to campaign methods of publicity. The usual aim is to elicit financial support either by action of public officials or vote of the people, but the purpose may be to secure recognition and use of museum service. Schools, libraries, museums and other educational institutions rarely have adequate support, either financial or moral, unless their needs are brought forcibly to the attention of the people.

However, spasmodic effort cannot be expected to overcome the effects of indifferent management or lax work, or to take the place of regular continued publicity. An institution must have a background of commendable performance upon which to base a campaign—except in the case of a newly organized or reorganized museum, for which the future may be the basis of claims.

Whatever the character of a campaign, the first step is to ascertain whether provision is made in the law for the ends that are sought. If a bond issue is proposed, the city should have the necessary authority under its charter, and if an appropriation is desired, the local authorities should be able, under state legislation, to appropriate for the purpose. If the way is not paved legally, the first move must be to secure a charter amendment or a new enactment, as the case may be. These matters are discussed in other chapters—pages 77 and 59.

CAMPAIGN TO INFLUENCE OFFICIALS

A campaign to secure favorable action on the part of any body of public officials need not be as strenuous as

one to poll a vote, because the number of persons from whom action is expected is smaller. Still, such an effort has much in common with an appeal to the people because officials usually have to be convinced of popular approval as well as informed on the merits of a case.

For the creation of popular sentiment there are two most useful methods—newspaper publicity and public speaking. During the month or more which should be given over to any campaign, stories should be released regularly to the press. They should begin with the more general aspects of the situation, and in the end should deal very specifically with the action that is sought. Since news incident is always necessary to give a story value in the eyes of an editor, incidents should be manufactured. Interviews with important citizens and public utterances of museum trustees or staff members may be used to give news action to what is really propaganda. Data on conditions in other cities and letters from persons out of town may be published to evoke a spirit of competition.

The second approach to the public—that is, through public speaking—has direct effect and is useful indirectly as a basis for news stories. Usually, it can be carried on by persons officially connected with a museum. Public gatherings, except such as may be called for the purpose, are difficult to reach, but small meetings, such as those of clubs, granges and other social bodies, religious, political and labor organizations, scouts and many other special groups are usually hospitable to outside speakers. After presenting his address and perhaps answering questions, a speaker should attempt to have the audience express itself in the form of a resolution of endorsement. All resolutions should be collected and copies bound into volumes for presentation to officials. In one city a petition received the signatures of 33,900 citizens in a population with only 39,000 voters.

Efforts to make a public showing, however, should not obscure the importance of quiet direct influence. Officials may be interviewed and presented with convincing written statements of local conditions, supported by statistics from other cities. They may be approached through friends and by devious channels of legitimate influence, and they may even be publicly lunched in order to afford opportunity for persuasion through speeches—although if a public hearing is held, this last opportunity is afforded automatically.

Usually these various methods suffice, and it is unnecessary to go to the expense of printing campaign literature, but, if need be, the methods discussed in the next section may be adopted.

CAMPAIGN TO POLL A VOTE

In order to influence popular vote, intensive effort may be sustained for perhaps a month; people tire of a longer campaign. The time deserves to be picked with care. A year when public economy is an important issue in politics is a bad one for urging museum support, although campaigns have been known to succeed even against such odds. A tie-up with some unpopular issue is also dangerous. A bond issue for museum building may lose by being voted upon as part of a larger issue mainly for streets, let us say; but on the other hand it is materially assisted if the streets proposal is a winning one. All such conditions should be studied in advance.

Before starting a campaign it is essential that statistics and other facts be in hand and worked up for use. The case should be presented clearly and briefly in a campaign leaflet which should be printed on fairly light paper for convenience in mailing, and should be of postcard size—$3\frac{1}{4}$ by $5\frac{1}{2}$ inches—or less, so that a copy may be enclosed

in a small envelope. A great many leaflets are sure to be needed—a number equalling at least half the population, and if type is held more copies can be printed at short notice. The cost of leaflets is usually the principal expense item of a campaign, so that if the printing can be secured as a donation, a large obstacle is overcome. Posters are useful but not essential.

While preliminary arrangements are being made, newspaper publicity should begin. News of the campaign itself should not be released until the organization is developed, but the object to be sought should be dwelt upon for weeks or months ahead in order to prepare the public mind.

The usual machinery of a campaign is a volunteer organization. Although museum trustees may be active and the director and members of his staff are to bear the burden of work, it is best for those connected with the institution to remain in the background so that the campaign may appear to be conducted by a committee representing the community. The chairman should be an important citizen. His influence determines largely the amount of publicity that will be received and the reception that the effort will be given in many other quarters. Members of the committee should be outstanding men and women representing social, religious, political and other groups. Strong local organizations should be represented, and newspaper editors, as well as other individuals who can give help because of their personal positions, should not be overlooked. A large committee is not necessarily unwieldy since as a whole it need not transact any business. The concerted work is usually done by an executive committee composed of the chairmen of subcommittees and perhaps a few other persons. The members of the large committee may be called on individually for specific assistance.

Sub-committees may be of two sorts: those which are to do certain tasks—provide speakers, arrange for transportation or canvass—and those which are to make contacts with specified groups of people—boys, girls, women, merchants or labor. The number and character of sub-committees must reflect local conditions. There may be as many as desired, but the mistake should not be made of constituting a sub-committee to do something that can be managed better by a member of the force of untitled helpers, either volunteer or paid, who should be gathered about the museum director to bear the brunt of work. If this question is not considered in advance, serious administrative difficulty may ensue.

Each sub-committee may consist of some people who will work and others who can use influence. An organization of a dozen sub-committees should be able to reach several thousand voters through ordinary channels of personal contact even before the campaign begins.

Each sub-committee should determine upon its own program. Through meetings of the executive committee, the chairmen of the various sub-committees have opportunity to coordinate their work. There should be free exchange of assistance between sub-committees which represent functions and those which represent groups of people. The Speakers Committee—really a sub-committee—should enlist volunteer orators and arrange, with the help of other sub-committees, to place speakers before as many audiences as possible. It should also seek to influence professional speakers such as the clergy to dwell upon the campaign. The Transportation Committee should find private vehicles to carry workers, especially on Election Day, and through the Merchants Committee it should arrange for commercial vehicles to convey stocks of leaflets and other paraphernalia. The Canvassing Committee should find ways to place literature in homes,

offices and stores. The Election Day Committee should contrive to get out the vote.

There is no usual practice in handling the school situation and publicity. Ordinarily, however, it is better for the director to hold these reins than to hand them over to sub-committees. The schools are deluged with demands upon their time, and more can usually be accomplished by an interview with the superintendent than by the onsets of a committee. The superintendent may be willing to suggest by letter to the principal that certain subject matter be presented to the children at a convenient time as the basis perhaps of a composition or some other work that is in the regular curriculum. An essay in the form of a letter to parents may be taken home and be doubly effective. Such help is all that the schools can be expected to give.

Publicity is often turned over to a publicity agent who is employed for the period of the campaign to work under the director. If the agent should desire a committee to abet his efforts one may be appointed, but ordinarily an individual who knows the work can do very much better if unhampered.

Newspaper work for a campaign is not essentially different from that for other times although the intensity of the effort may offer unusual possibilities. Stories may assume the "scare 'em" note of political propaganda by showing the dire results that would ensue if the vote should be lost. Interviews may be secured from public men more easily during a campaign than at other times. Advertisers may be induced to adapt campaign material to their uses in making up advertising copy.

There is no end of special ways to attract attention. But though possibilities are unlimited, the character of a campaign must be determined by the amount of money available. Excitement should not be allowed to bring

about over-commitments. The trustees should adopt a budget based upon careful estimates of cost, and its appropriations should not be exceeded.

CAMPAIGN FOR MEMBERS

A campaign for members is essentially one for small contributions. Except at the time of establishment or reorganization of a museum, such a campaign is hardly to be recommended since continued persistent solicitation by regular methods is much more productive in the long run. However, if a special effort is to be made, it usually combines the member-getting methods, discussed in the chapter on membership—page 36—with campaign methods designed to awaken public interest and so to prepare individual minds for a personal approach.

Some museums employ professional solicitors and pay on a commission basis. This practice is not entirely satisfactory since it invites criticism from those who feel that too large a part of each contribution is dissipated.

CAMPAIGN FOR RECOGNITION

A campaign is sometimes launched in order to secure recognition for a museum and use of its facilities, but unless it takes the form of a *week*, the effort is likely to be not truly a campaign but rather a feature such as a contest or a special run of newspaper publicity. On the whole, the best way to secure public patronage is to develop a sound and useful program and to keep it before the people day in and day out.

Weeks are overdone; they recur monotonously every year, and there are too many kinds of them. A campaign should be of rare occurrence—a hard fight for a definite end. Like any other fight it should be undertaken only for a good cause and it should be fought hard.

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FIFTH PART

RESEARCH

XLVII

THE SMALL MUSEUM IN RESEARCH

To increase knowledge is properly a function of museums, since most museum collections contain materials for research, and many of the persons who are drawn to museum work are of the research type of mind. Also, in the very nature of things, there seems to be interdependence between educational effort and scholarship—balance between the two being helpful to the full success of each.

However, a small museum may not be able to develop any considerable program of research because of staff limitations. It is the experience of directors that pressing duties seldom leave time for scholarly pursuits, but even if opportunities were abundant, not many directors would be likely to engage in research since the qualities of mind that make for effectiveness in administrative work are not those of the original investigator. On the other hand, curators are in contact with research problems daily. The care of a growing museum collection is in itself not far from research, and therefore it is not surprising that curators are responsible for most of the contributions to knowledge which museums make.

Research cannot well be promoted artificially. It must be allowed to develop as the required human elements enter into a situation. But deliberately to gather up the materials for research is quite possible, and it is a duty with respect to any materials that are being rapidly dispersed or lost. For this reason every museum may

be expected to carry on a continuous survey of its region.

ARCHÆOLOGICAL AND HISTORICAL SURVEYS

An archæological survey is an attempt to discover the locations of deposits left by prehistoric man. Its purpose is to bring about careful study of any that cannot be preserved, and to protect the others from destruction at the hands of vandals or persons unqualified to disturb them. Because of the rapid disappearance of remains and the extensive operations of souvenir hunters, amateur collectors and half-trained archæologists, emphasis upon conservation is of great importance. One immediate purpose of such effort may be to secure permanent preservation of sites as parks—either state or local—so that they may be developed as outdoor exhibits and studied without being entirely destroyed. Collectors, property-owners and citizens who make public opinion by their collective thought, have opportunity to help in getting information from scattered sources and bringing a community of effort to bear upon the delicate problems of conservation. A museum which is successful in discovering and protecting the remains within its region is prepared for masterly research extending over many years, whereas one which exerts itself only in digging is sure to do inferior work in its haste.

An *historical* survey also draws upon many scattered sources of information, and is dependent upon public generosity and cooperation, but objects are not buried in the ground and therefore do not have to be left where they are for purposes of record. To secure data, early settlers may be interviewed, tombstone inscriptions copied and perishable records put into permanent form. In a questionnaire framed recently by the Indiana Historical Commission, information was requested on the fol-

lowing subjects: first settlements, historic buildings, old cemeteries, battlefields, earliest churches, mill sites, deserted towns, boundary lines, birthplaces of noted people, markets, historic trees, old trails, trade routes and underground railroad stations. Among the objects sought were: old books, diaries, posters, proclamations, commissions, pictures, old china and furniture, clothing and textiles, firearms, tools, implements and transportation devices.

TREATMENT OF RESULTS

Papers giving the results of research may be contributed to established technical publications. Few small museums are able to do their own publishing and this is just as well, since it is undesirable that the number of serials be multiplied.

Reports of surveys are usually so voluminous that to publish them in full may be out of the question. Technical journals are besieged by contributors and few papers of sustained length can be accepted by them. However, the record of every survey is valuable and proper steps should be taken for its preservation. A way to accomplish this is to prepare at least two typewritten copies and to deposit them, suitably bound, in different places—the original in the library of the museum, and the copy in the state library, perhaps. Some studies have been put on record by subscription, fifty or more copies being purchased by institutions at a price that pays the cost of mimeographing and binding.

In order to make such a piece of work better known, a summary may be prepared for several publications. This gives students knowledge of the study, apprising them of the main conclusion and indicating where the full manuscript may be consulted, and also it serves to give credit and satisfaction to the author.

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SIXTH PART

BUILDING

XLVIII

PREPARING TO BUILD

It is a mistake to build during the early stages of a museum's career. A museum is not a building but an organization, and until the organization has taken shape it is shortsighted to attempt to house it. Temporary quarters afford the best opportunity for natural growth up to the point where there is stability, constructive work, knowledge of requirements, definite outlook and grounding in public sympathy that assures support. This is a matter of virility, not of age. A museum may reach the building stage in a few years, or after decades it may still be unprepared. An institution seldom springs to life from the footing of a new house. In fact, it is hardly justified in spending its own or the public's money for a building unless the organization is well managed, active, growing and gives promise of paying dividends in service.

When the time to build arrives, a museum may find itself in possession of land acquired by gift. If not, efforts ought to be made to secure a grant of public land and authority for flotation of a city bond issue to provide a building. These matters are explained quite fully in the chapters on income and plant. Whatever the source of building funds may be, museum trustees should have authority to choose an architect and to supervise the planning of the structure.

THE ARCHITECT

On the subject of choosing architects for public buildings in general, Charles Harris Whitaker, Editor of the Journal of the American Institute of Architects, writes:

"To seek expert knowledge by inviting any and all architects in the neighborhood to submit plans and sketches is . . . a folly. Expert knowledge cannot be had in that way. The architect who enters what is known as the 'wild-cat' competition cannot possibly be expected to be thinking *first* of the community that has thus so foolishly sought his services. On the contrary, by the very law of competitive business, he is thinking first of how to get the job, and thus he is always tempted to promise much more than he can give with the money to be spent. Do not try to get expert knowledge in this way; the experience is bound to be expensive.

"Thus it becomes plainer and plainer that the problem of getting the right kind of public building is the problem of getting the right architect, and he is needed from the very outset, be it remembered, and not to be called in as a last resort when other methods have failed.

"The best way to choose an architect is the way in which one would hire a lawyer or a sewage disposal expert or a water-works engineer. Engage him on his known record of performance, on the things which he has already done for others."[1]

However sound this last injunction, it is difficult at the present time to get an architect who has experience with small museum buildings. The field is new, and, until it has been worked more fully, trustees will be under the necessity not only of finding a capable man but also of setting before him a simple and concise statement of the uses to which the proposed building is to be put and the facilities which it should provide. Therefore, the essen-

[1] Municipal index, 1925, published by the American City Magazine, New York City, 196.

tial qualifications of the architect would seem to be sympathy with the needs of the museum and fitness through temperament and experience to provide for these needs in an appropriate structure. Most difficulties seem to come from the fact that the trustees give no definite specifications, or that the architect is disinclined to consider functional requirements.

THE SITE

The site for a museum building should be easily accessible from all parts of the community. A central location is best but in any event the site should be chosen to favor the greatest number of people.

The plot should be ample. In a small community there is no reason for the choice of a small lot demanding vertical construction, although this feature is making its appearance in museum planning for large cities. The land should provide not alone for immediate building needs but also for future growth. Openness of plot reduces the fire hazard arising from proximity to other buildings, and tends to reduce the nuisances of dust, smoke and noise. Such matters, though secondary to questions of general location, are of importance.

Any factors which enter into the cost of construction or determine working conditions in the finished building should be taken into consideration. The lot should be dry. Slope is useful if it is downward towards the rear, because it permits back basement doors to open at grade, but difficulty is presented by a lot that is low in front. A northern exposure is usually preferable, and attractive surroundings are advantageous.

The future of the land should be considered in relation to the city plan and directions of community expansion. Land that will increase in value and become accessible to a larger portion of the population is to be desired. Of

course, land value is only indirectly important if use of public land is obtained.

Many museums are in parks, and this location seems to be gaining in favor. In many instances park property is centrally or conveniently located, attractive and open, free of fire hazards and relatively devoid of nuisances. It offers exactly the atmosphere of recreation and relaxation that a museum needs, and, furthermore, it may offer the only opportunity for use of public land. However, physical attractions should never outweigh marked advantages of location. A museum exists primarily for use.

A museum building should not be an annex to a library, a town hall or any other building. Experience has demonstrated amply that such an arrangement leads to difficulties.

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XLIX

SMALL MUSEUM BUILDINGS

For guidance in the planning of small museum buildings, there is little to be gained by study of examples. Only a few small buildings have been constructed, and none of them are generalized in plan. However, there is ample background of experience to draw upon. Certain principles of museum construction have emerged from a century and a half of practice, and they are now well defined. There is a further fund of data to be drawn from the hundreds of small library buildings that dot the country. They are planned for uses that are comparable to those of museums, and they have been designed in the light of lessons learned from the same public scrutiny which museums must endure. The library movement is decades in the lead, and museums may profit by the long experience.

Many different plans might be devised in application of exactly the same principles. There is no one best way for all museums or even for all small museums. Therefore a stereotyped plan need never be adopted. Each museum has its peculiarities of organization, work and outlook, and each reflects the character of its own community. These traits, together with physical conditions and the amount of funds available, should individualize the planning for each institution. There need be little sympathy for a stock plan but there should be firm insistence upon a plan that is founded on stock principles.

PRINCIPLES OF MUSEUM PLANNING

Some years ago the American Library Association adopted a code of rules to guide in library planning, and

most of its dictates are applicable to museum buildings either as they stand or in adaptation. Revamped for present purposes, the code might stand as follows:

Every museum building should be planned for the kinds of work to be done and the materials to be accommodated, both of which depend in part upon the character of the community to be served.

Plans should provide for future growth and development.

The interior arrangement should be planned before the exterior is considered.

The arrangement should be such that the building can be administered economically, and no convenience of arrangement should be sacrificed for architectural effect.

Public rooms should be planned for supervision by the fewest possible attendants and for free motion and proper routing of visitors.

Exhibition rooms should be as near to the main entrance as is practicable.

Offices and working rooms should be accessible from the entrance without passage through exhibition rooms.[1]

The lecture hall should have a separate entrance so that its use may be independent of museum hours.

The architectural treatment and decoration of exhibition rooms should be subordinated to the exhibits which they contain.

Flights of stairs should be straight, not circular.

Lighting and shelf arrangement in libraries are relatively simple matters and are covered, therefore, in the

[1] This may be partly overruled in small museums by considerations which remain to be discussed.

library code, but museum lighting is too mooted and involved a question to be reduced to simple general terms, and museum exhibition cases should not be fixed equipment of the building, as are library shelves. Hence these subjects are not considered at this point.

ROOMS AND THEIR ARRANGEMENT

The number, character and arrangement of rooms in a museum building, are dependent largely upon the size of the museum staff. But whatever plan may be adopted, the major space division is between public and staff uses.

Public rooms are of two categories, with respect to their administration:

1. Rooms which require continuous supervision:

   Exhibition room(s)
   Reading room
   Book stacks

   These should be arranged for economy of oversight. The number of exhibition rooms may well correspond to the number of main branches of exhibits, but in a small museum a single room may be divided by cases. Partitions are to be avoided since they interfere with rearrangements and make supervision difficult. In a small building, also, the book stacks may be housed in the reading room; the two combined are referred to hereafter as the library.

2. Rooms which are supervised as a matter of course whenever they are used:

   Lecture hall
   Classroom(s)
   Clubroom(s)

These may be isolated from the other public spaces. Classrooms and clubrooms may all reduce to a single room in a small building.

Staff rooms may also be referred to two categories on the basis of the sort of work that is done in them.

1. Rooms for professional work:

   Director's office
   Curators' room(s)
   Study collection room(s)

   Although it is desirable to have these rooms removed from parts of the building frequented by the public, this is not entirely practicable if the staff is so small that persons who carry on the professional work must watch visitors as well. In the case of a very small museum having only one person regularly in attendance, the director's office must be located at a point from which the exhibition room and library can be seen, and all of the rooms enumerated above may advantageously be thrown into one area, or director's room. However, space for the study collections should not be obliterated in the consolidation.

2. Rooms for non-professional work:

   Shop
   Receiving room
   Storage
   Boiler room

   These rooms should be inaccessible to the public, and they may be isolated more or less from other staff rooms.

To sum up—every small museum needs at least the following rooms:

PUBLIC ROOMS

Group I	*Group II*
Exhibition room	Lecture hall
Library	Classroom

STAFF ROOMS

Group III	*Group IV*
Director's room—with space for study collections	Shop
	Receiving room
	Storage
	Boiler room

Groups I and III must be closely associated in a small building; Groups II and IV are independent units. In addition to these rooms, there should be two toilets. They must serve for the staff as well as the public and, therefore, should be so located as to be under control.

A vault is useful for the safekeeping of valuable objects. Also a fireproof projection booth should be provided for the lecture hall. A janitor's closet with slop sink should not be overlooked; in fact, one on each floor is advantageous.

ARRANGEMENT BY FLOORS

Arrangement of rooms is governed by requirements for their use, and also by the character of the building. Library experience seems to show that "best results for a small general library are obtained by adopting the one-story and basement rectangular type of building."[1]

[1] "By a one-story and basement building is meant a building with the basement about four feet below the natural grade, the basement being from say 9 to 10 feet and the main floor from say 12 to 15 feet high in the

This conclusion is based upon considerations which apply equally to small museums, and therefore it is reasonable to accept it for present purposes.

On the principle that exhibition rooms should be as near to the main entrance as is practicable, the front portion of the first floor is preempted for this use, and since rooms of Groups I and III must be together, they all must occupy the first floor. In consequence of this arrangement rooms of Groups II and IV would naturally be allocated to the basement. However, objection is sometimes made if children are required to be in the basement, and even though the point may not be well taken, complaint on this score might just as well be made impossible by planning for an upstairs classroom. The chief drawback to a basement shop is that difficulty may be encountered in getting large objects to the exhibition floor, but this can be overcome by running them outdoors, around and in again by the front entrance. Large doors are exceedingly important.

Toilet rooms are usually located in the basement.

To sum up again—a practical arrangement by floors is as follows:

First Floor	*Basement*
Exhibition room	Lecture hall
Library	Shop
Director's room—with space for study collections	Receiving room
	Storage
Classroom	Boiler room
	Toilet rooms

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clear. Plans have at times been submitted for 'one-story and basement' buildings, which differed from two-story buildings only by having stair to the upper floor outside instead of inside!"—Notes on the Erection of Library Buildings. Carnegie Corporation of New York.

The placement of stairs is dependent upon the size of building. In a small building, requirements of the staff conflict somewhat with convenience of the public, and the requirements must take precedence. Therefore, the stairway should descend from the staff rooms, but it should be easily accessible from the exhibition room for occasional use by visitors. In a larger building, a second stairway should descend from the public area—preferably from the vestibule.

EXPANSION

Funds for building are usually insufficient for immediate needs, not to mention future ones, but all anticipated needs should be provided for on paper. During the early years of a museum's career a building of adequate size is not as important as a comprehensive and far-sighted plan. Features which any scheme of expansion should possess are the following:

1. Small beginning
2. Permanence of each part that is built
3. Possibility of making several successive additions
4. Flexibility in sequence of these additions
5. Distribution of more costly construction
6. Functional completeness at each stage
7. Good appearance at each stage if practicable

Permanence of parts that are built and functional completeness at each stage are dependent largely upon interior arrangement. Appearance is principally a question of architectural treatment, although a building which presents one of its longer sides to the street at each stage is much easier for the architect to deal with than a narrow deep one.

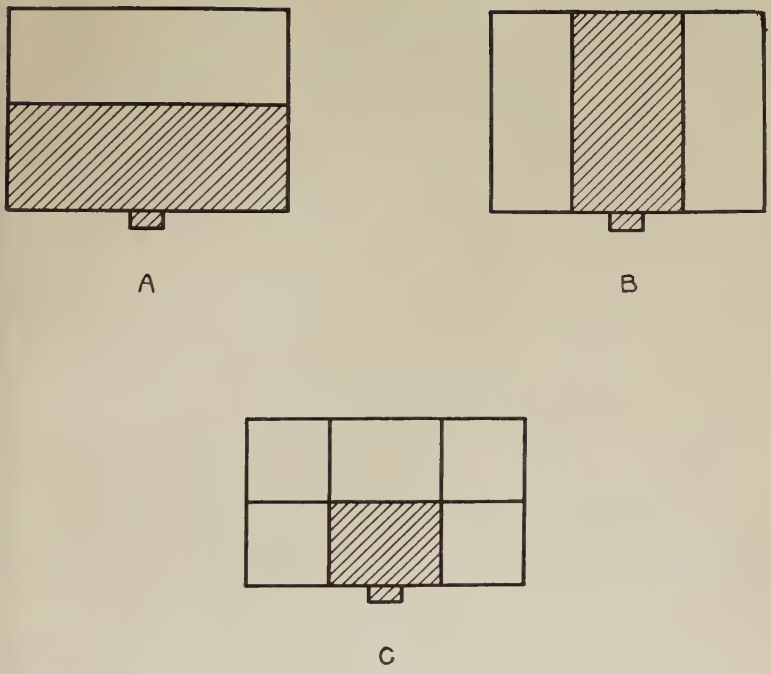
The two most obvious alternative plans for expansion

are to start with a wide but shallow unit and add at the rear, or to start with a narrow but deep unit and add laterally. These possibilities are shown in Plate 25. Method A throws all the more expensive construction into the first stage; method B, distributes this load. From the standpoint of appearance, the former plan is the better. However both methods start rather too ambitiously. A combination of the two, shown as C, overcomes this disadvantage, increases the number of possible additions and the flexibility of procedure, distributes cost of the façade and from the outset presents a long side of the building to the street. If the site is a corner lot, other arrangements are possible as shown at D and E.

Although only a portion of the larger building, the first small unit may be quite complete within itself so far as function and appearance are concerned. By prearrangement of a sequence of uses for certain rooms, a building may be made at every stage of its growth to accommodate all the various activities that it houses rather than to be either a makeshift during early years or an outgrown home after its first stage has been passed.

LIGHTING

On the subject of museum lighting opinions differ. There is one school that asks to have all natural light shut out of exhibition rooms because it fades exhibits and also because shifting rays of the sun are difficult to cope with, exhibits do not show to advantage when the light is dull, and windows waste useful wall space and admit dust. Others want the cheerfulness of natural light and breeze at whatever loss of technical advantages. Most museums compromise by using natural light, controlled by shades and supplemented when necessary by artificial light. By placing windows high, wall space is



MODES OF ENLARGING A BUILDING.

conserved for exhibits, and, although views and breezes are sacrificed, there is some cheerfulness and air. For small buildings this middle course is best because, in the absence of a ventilation plant, windows are essential.

Skylights are luxuries. They add to building costs and are expensive to maintain because they trap dust and snow. They tend to leak also and are hot.

For general purposes, the best lighting is afforded by a row of windows immediately below the ceiling along each of the longer walls.[1] The size of openings must be determined by the size of room, but the sills should be at least 10 feet from the floor to prevent light from glaring into eyes directed at the wall below. The windows should reach to the ceiling, the height of which is fixed by the size of room and the area of light openings required. The minimum height is about 13 feet.

Windows which tilt inward at the top on bottom hinges are to be preferred to ones that hang, slide or pivot, because screens and shades are easily adjusted to windows of this type. There should be a rod attachment to control the sash. If dust is a serious nuisance windows may be kept closed as much as possible. Light is regulated by shades which roll at the bottom and pull upward. This gives some control of direct sunlight—the worst cause of fading and glare. Opaque shades are better than translucent ones because they do not change the quality of light and they may be used to shut out all light from one side or the other. If shades are double surfaced—light inside and dark outside—their reflecting inner surfaces help to light the room.

There are many special methods of museum lighting,

[1] In some cases, both of the two long walls of an exhibition room are not available for windows. This is very likely to be true of the central unit of a building, which may constitute the entire structure as first erected. The next chapter deals with this special problem.

and some of them are excellent, but if the recommended scheme is to be modified careful study should be given by an experienced person to each specific problem.

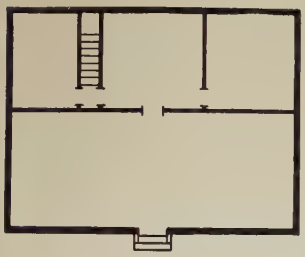
Artificial lighting of exhibition rooms should be indirect, as explained further in the chapter on interior and equipment—page 318.

ARCHITECTURAL TREATMENT

The question of architectural treatment is an after-consideration which should not be permitted to warp the plan. However, in its place it is of great importance. "It is not enough that a building *serves*. It must *inspire*."

The structure need not be monumental or of severe aspect. To be a source of inspiration it should be inviting in appearance. Cheerful simplicity is more to be desired than impressive elaborateness. A librarian has decried "Greek temples and Roman palaces executed in cheap brick and poorly mixed concrete" and even though the workmanship be good there are reasonable objections to such designs for small public buildings of any sort. It is generally agreed that the type of architecture should be suited to the environment—climate and local tradition. By using materials of the region and harmonious designs, each section of the country may produce its own type of museum building from plans that follow somewhat the same general lines for all.

Construction should be fire-resistive. This sets an awkward limit on materials, but safety for collections is imperative. Cost of construction is so variable in point of time and place, that general estimates have questionable value, but even the most modest effort would doubtless cost $15,000 or more. Twice that amount should produce a good small building.



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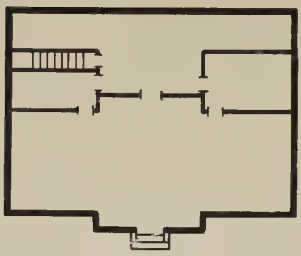

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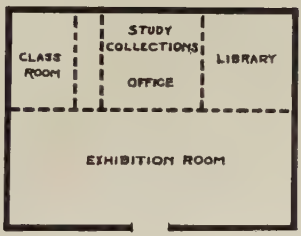
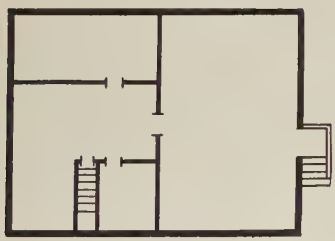


GENERAL PLAN



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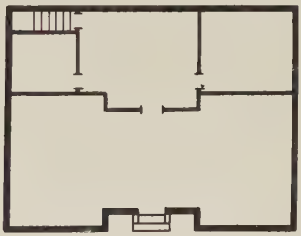


D

FIRST FLOOR PLANS FOR SMALL MUSEUM BUILDINGS.

L

ADAPTABLE BUILDING PLANS

THE principles discussed in the foregoing chapter together with conditions that characterize any particular building problem—conditions such as nature of site, funds available, and staff, activities, collections and exhibits to be housed—prescribe the general lines of a building. For each combination of circumstances the solution or the range of possible solutions is different, and within the limits of any one plan there are ample opportunities for expression of individuality. Therefore it is improbable that even the most general and rigid observance of correct principles in planning would lead to dull uniformity among buildings.

In this chapter plans are worked out for a suppositious small museum. Growth is indicated, stage by stage, up to the point where the building ceases to be small. In the initial stage, the building is appropriate for a small town; in the final one, it is suitable for a city of perhaps 100,000 inhabitants. The ways in which this hypothetical institution meets its building needs should be helpful to any museum that has similar problems.

THE CONDITIONS

Let it be supposed that the museum of a certain small community is housed in temporary quarters, with one employee—the director. It has fair collections and exhibits in history and a nucleus of exhibits in science. Art is to be treated in due course. Educational work is being carried on in a small way. The town has provided an ample site, and a fund of $15,000 has been granted for building.

The community is growing rapidly and the museum is expected to keep pace.

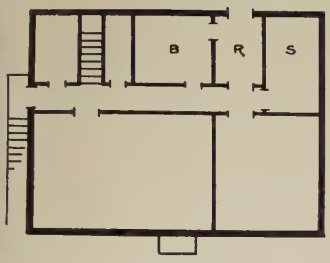
The immediate problem is to plan a building that will serve present needs and that may be enlarged in course of time.

THE FIRST STAGE

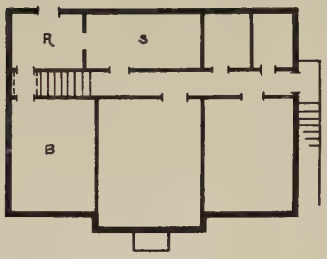
For reasons already given it is decided to begin with a small central unit to which additions may be made at the sides and rear. A one-story and basement type of building is selected, and rooms are to be located as follows.

First Floor	*Basement*
Exhibition room	Lecture hall
Director's room—with space for study collections	Shop
	Receiving room
Library	Storage
Classroom	Boiler room
	Toilet rooms

On the first, or main, floor about one half the entire area is set apart for the exhibition room. The portion nearest the front entrance is most desirable for this purpose in order that the majority of visitors may come at once upon what they are seeking, and so that all who enter the building may receive a pleasing first impression. A single room must suffice at first, but divisions may be made by use of exhibition furniture. An interior vestibule is not necessary, but if one is provided it should not encroach unnecessarily upon exhibition space. Directly off the exhibition room and commanding a fairly complete view of it should be the office. The rear of the office may be used for study collections—ample space



A



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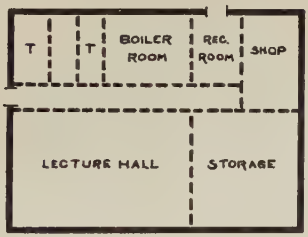
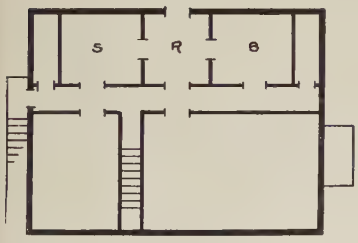


GENERAL PLAN



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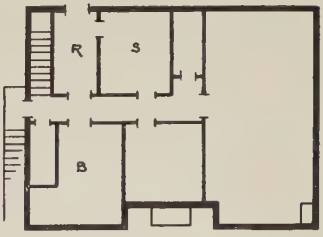


D

BASEMENT PLANS FOR SMALL MUSEUM BUILDINGS.

being set aside for this important purpose. The library and a somewhat smaller classroom should each be adjacent to the office. A stairway from the office to the basement is required, and the more accessible it is from the exhibition room, the better. These functional requirements are shown diagrammatically in the *general plan* of Plate 26.

The other plans of Plate 26 show a few of the many possible arrangements. Plan C is commendable if no addition is ever to be made to the entrance side of the building.

In the basement a central hallway is inevitable. A separate outside entrance, provided for the lecture hall, may enter upon the hallway but this requires that all basement rooms as well as the stairway to the first floor have doors with locks. The basement entrance is placed at the side of the building even though a lateral addition on the same side is in prospect; another entrance will be made when the building is enlarged. The receiving room requires a back entrance which may be at ground level if the land slopes away to the rear. The shop and heating plant should both be adjacent to the receiving room and should have direct access to the back entrance. Movement of large objects between the outside, the receiving room, the shop and the storage is provided for by large doors and straight passages. The areas which may be allocated advantageously to the various rooms are relatively about as shown in the *general plan* of Plate 27.

Plan A is selected after considering various possible layouts, including those shown in the other plans of Plate 27, each of which is designed to go with the respective first-floor plan of Plate 26. Plates 28 and 29 give the two floor-plans in greater detail and with minor additions such as a vault and janitor's closet. The Frontispiece shows an appropriate design for the façade.

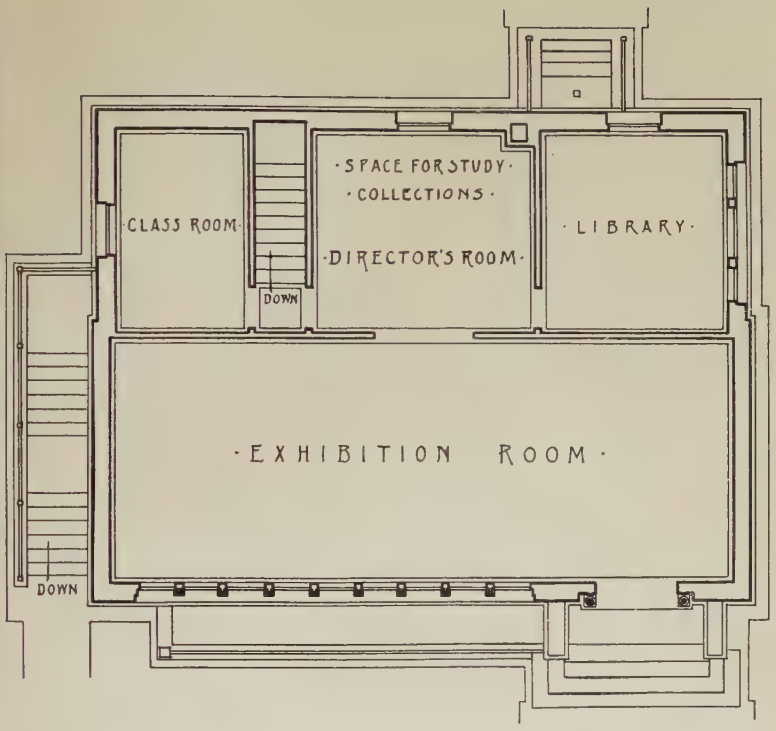
SECOND STAGE

Let it be assumed that growth of the suppositious small museum is to be constant and well balanced, and that moderate building funds are to become available from time to time to meet the most pressing needs.

It is likely that the first congestion will be felt when history outgrows its exhibition space. Addition of a right wing as shown in Plate 30-A would serve this need without disturbing rooms on the first floor or any of the basement rooms except the shop, which is temporarily reduced in area. The new exhibition space on the first floor might be assigned to history, giving it ample accommodations and incidentally doubling the room available for science, and perhaps also providing for the first art exhibitions. Downstairs the new space might be utilized either for storage or for overflow of some upstairs activity. As already pointed out, the lower floor is not altogether suitable for bookstacks, study collections or a room for children's work, but in a dry region or on a site which slopes downward under this wing, any work whatever may be carried on in the basement.

THIRD STAGE

It is fair to assume that the next need for space will be on the part of the study collections, and that, at about the same time, the library will be seriously congested. Either of these needs would be met after a fashion by use of the basement of the right wing, but sooner or later more convenient quarters would be needed. A simple plan is shown in Plate 30-B. The new section, being at the rear, may be of relatively cheap construction. It might have been built at the outset except that architecturally it would have been undesirable before the wide frontage was acquired. On the main floor, both the



FIRST FLOOR

PLAN OF PLATE 26A IN DETAIL.

study collections and the library are provided for, and in the basement the shop is more than compensated for space lost previously. The receiving room is enlarged and the boiler room is given an addition which may be requisite. One of the toilets is relocated to afford light and air.

FOURTH STAGE

Either the science or art exhibits, or educational work may reasonably be expected to make the next demand. In either event the remedy would be the same—a new wing. If the plan of Plate 30-C is followed a new lecture hall, probably much needed by this time, is provided in the basement. This relieves crowding of the educational work since it liberates the old lecture hall for use as a large classroom or several small ones. The intention of keeping the children out of the basement is violated by this arrangement, but there may be no help for it.

The possibilities for further additions are limited only by funds and land. Exhibition sections might run backward from the two wings, or working spaces might be added laterally to the rear of the central section. However, the building would then cease to be small and need not be considered here.

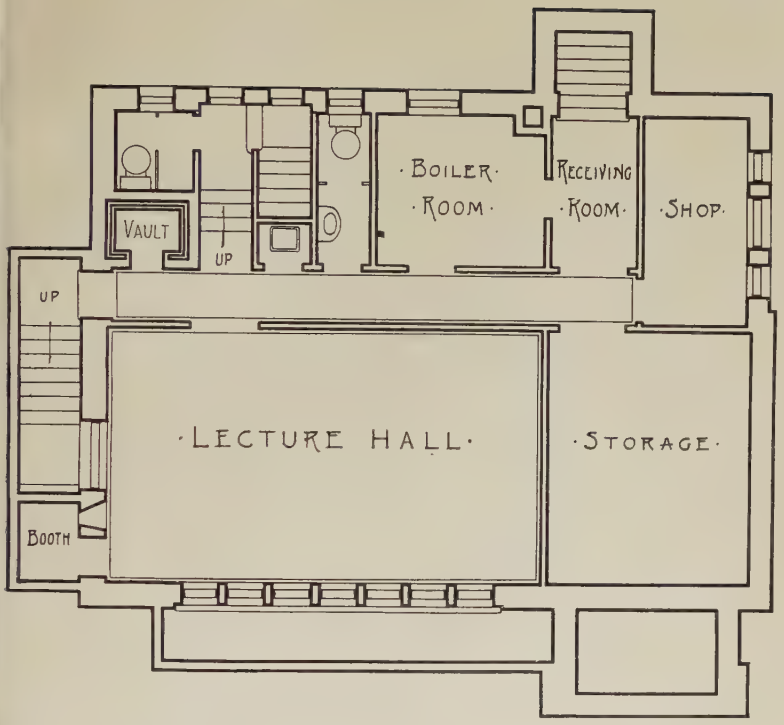
Plate 31 shows a design for the building with the additions that have been described.

The foregoing building project is outlined on the fair assumption that strict economy is important. Therefore reconstruction is avoided and consequently some of the arrangements are far from ideal. If extensive alterations are to be made as new parts are added, somewhat different arrangements may be planned. As the building grows the staff must increase. When the director is no longer without help, some of the features shown in Plates 26 and 27 lose their appropriateness, and if they are

retained in the enlarged structure, they are essentially vestiges. The cramped rear wing is an example; to extend it farther would wipe out the back entrance and dislodge the heating plant. The back stairway, the location of the office, the conjunction of office and study collections, the single office door—each of these, similarly, is an outgrown feature which a fairly obvious and simple alteration can remove.

The two lateral wings present the lighting problem in its simplest form. In each wing the two long sides are unobstructed and each may be pierced with a row of high windows. If the building faces north or south, the southerly windows may have curtains drawn when the sun is shining, especially in winter when the sun is low.

The central unit is more difficult to light because its front wall is broken by the entrance and its rear wall is entirely obstructed. However, the front wall may bear all but the middle portion of the usual row of high windows, and, if the architectural scheme permits, the openings may be carried over the front entrance by a sort of high transom. This arrangement should give sufficient light, but if the conventional two-side lighting scheme is desired, the ceiling height of the office and adjacent rooms may be stepped down enough to give window room on the riser. Additional windows at the ends would produce glare and are not to be recommended even as temporary features before wings are added.



BASEMENT

PLAN OF PLATE 27A IN DETAIL.

LI

INTERIOR AND EQUIPMENT

THE interior finish of a museum follows lines that would be adopted for any fire-resistive building—except in the exhibition rooms, which present special problems.

EXHIBITION WALLS

The walls of some exhibition rooms are left in the rough sand finish, but as a rule they are either plastered and tinted, or sheathed and covered with coarse cloth. Cloth is most used, partly because of its pleasing appearance and partly because it is not greatly damaged by nails and screws. Walls finished in this way should be sheathed in wood, covered with asbestos paper and surfaced with the cloth. Burlap may be selected, but certain of the coarse wall fabrics on the market are better. Colored material fades; the natural straw-color is best, but even this should be tested for fading by exposing a sample in the sunlight with a portion covered. A coat of warm stain, such as cherry, on the wall under the fabric shows through just enough to give vibration to the otherwise flat tone.

For walls which are not required to support objects, paint on plaster is satisfactory, and this finish has greater possibilities of attractiveness than any other. Excellent results are obtainable by using a coarse spatter of one color and a fine stipple of another over a flat ground coat. Water color is satisfactory on rough plaster, but on a smooth wall a flat lead-and-oil paint should be used.

Whatever the finish, a color that does not absorb much light is to be preferred. Buffs, grays, blue-grays

and light blue tones are most pleasing. Ceilings should be lighter than walls. In trying out a color it is safest to use a fairly large wall area as a sample, since a small patch is deceptive. Appearance of spaciousness is obtainable by harmonious treatment of room-surfaces.

Every wall should be provided with a picture molding, since even burlap is cut somewhat by nail-holes, and its comparative durability ought not to be abused. The best molding for museums is that designed and manufactured by James F. McCabe of the Art Institute of Chicago. The McCabe picture molding is a strip, shaped in cross section like a G, which is set into the wall flush with its surface. Hooks for use with it are shaped so that they cannot disengage and fall accidentally.

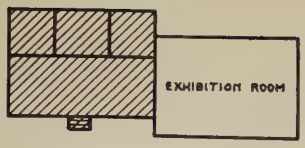
Wall area for picture hanging may be increased by use of temporary partitions, set off from a wall at intervals to make a series of shallow alcoves. Excellent for this purpose is a 2 by 4 inch joist frame covered with ⅞ inch pine trim and finished to match the wall. The effect of a cornice may be produced by a top-piece overhanging perhaps an inch on both sides and at the free end. A ½ inch baseboard of perhaps 10 inch height also adds to the appearance. These partitions may be 7 feet high to match wall cases and floor screens.

FLOORS

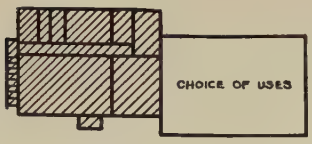
Wooden floors are taboo because of the fire risk. Cement floors covered with battleship linoleum are best. If linoleum is not put down at once, the cement surface may be painted with gray floor enamel to lay the dust.

ARTIFICIAL LIGHT

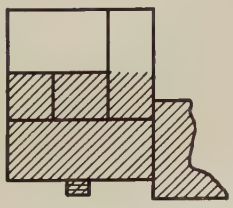
For exhibition rooms indirect light is best since reflections are troublesome with direct or semi-indirect illumina-



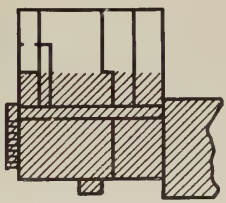
A-FIRST FLOOR



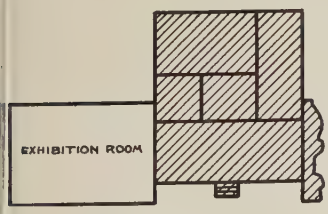
A ~ BASEMENT



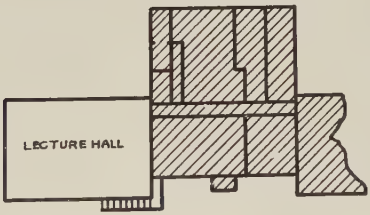
B-FIRST FLOOR



B ~ BASEMENT



C-FIRST FLOOR



C ~ BASEMENT

STAGES OF BUILDING EXPANSION.

tion. Units should be placed with a view to securing uniform distribution of light throughout a room, and not with reference to a projected plan of exhibits. Necessarily the layout of cases is ever-changing.

For work rooms, semi-direct light may be preferred in order to give greater intensity of illumination. If a museum installs its own power-generator, the lecture hall should be on city current so that the power plant need not be operated at night.

HEATING

From the standpoint of constancy of temperature hot water heating is best, but the excess of radiation which it requires makes it impracticable for museums. Hot air heating is too dirty to be considered. Steam heating therefore is usually employed.

In exhibition rooms, radiators should be recessed in the wall and provided with warm air ducts which open above the exhibition level. Another possibility is indirect heating—air being carried from pipes on the basement ceiling through warm air ducts to exhibition rooms. The best system—which can be employed only where there is an air-conditioning plant—is one which warms incoming air in the ventilating chamber and so dispenses with radiators altogether.

AIR CONDITIONING

There is no question about the desirability of equipment which ventilates with washed and uniformly moistened and warmed air. Also there is no doubt that such a plant is essential for a museum that has collections of great value. However, for most small museums, the initial cost of such an installation and the various expenses of upkeep are prohibitive.

FIRE PROTECTION

There are few fire hazards in exhibition rooms, the principal risks being in storages, shops and work rooms. Such rooms are on the ground floor of most museums, and therefore sprinkler protection may be provided readily.

The heating plant should be housed in a fire-resistive room, and means should be provided for cutting off the electric current at night.

PLUMBING

Piping, as well as wiring, should be accessible for repairs, not sealed into walls. Valves and switchboards should be placed where they may be reached easily but where visitors are not able to tamper with them.

Hadley suggests that the boiler be connected with the sewer drain-pipe so that it can be blown out for cleaning, and that a stop-valve be installed in the water line so that the boiler may be shut off without taking water from the entire building. The sink in the workshop requires a special trap. Otherwise debris and plaster cause frequent stoppages and constant annoyance and expense.

Area-ways of basement doors should be adequately drained to the sewer to prevent floods.

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DESIGN FOR THE FINISHED BUILDING.

CONCLUSION

LII

THE OUTLOOK

WHAT the future will witness no one can foretell, but grounds for speculation are offered by observable trends in the museum movement and by comparable developments in other fields. One thing is sure: museums will abide. The human impulses from which museum-making springs are widespread and deep-rooted.

Small museums are entering upon a road to dignity and importance, but they can progress only so far as the wisdom and the vision of trustees will lead them. There are a great many capable and devoted trustees of museums, but unfortunately there are also some indifferent and ill-informed ones. Public opinion of museums is changing rapidly and when trustees as a class come to a full realization of their opportunities, the next milestone in museum history will be passed.

As understanding of museum purpose spreads, the professional character of museum work will be recognized more generally. When a larger field develops, directors will be needed for many small museums, but relatively few will be found if conditions stand as they are today. But doubtless they will change. Efforts have already been set afoot among organized museums to increase facilities for professional training, and this is but part of a still larger plan which promises ultimately to create standards and accredited training schools for the profession as a whole.

Quite as important as any change that may come about in human factors, is evolution of financial elements. Two of the major sources of museum support—large private contributions and public appropriations—seem

to hold possibilities of important development. The library movement has received much of its momentum from contributions of an educational foundation. If museums should ever be the objects of similar benefaction, there would surely ensue a rapid expansion of museum service. This would not necessarily require extensive outlay, since quite modest subsidy should enable any small museum to employ a trained director for five years, and in this time to establish its activities and entrench itself financially. However, public support must be regarded as the enduring financial bulwark of museums. The key to this source of support is state law. Before adequate appropriations can be expected from authorities of the city and the county, state legislation authorizing them must be in force. At the present time eleven states have laws relating to museums, but only five make suitable provisions. The future will doubtless bring action in the legislatures, and in consequence of legal recognition, museums should have smoother paths.

But even more than management and money is needed. Cooperation—real cooperation—is required to complete a new regime. In time museums may abandon the secretiveness and the spirit of competition which so limit them. Then the machinery of joint action can be set in motion and cooperative staff and cooperative work will be in usual course. Then the post of *consulting director* may be a common one. Then state and regional conferences will develop and the members of each local group will find new power. Then small museums will be more effective, and large ones—sharing generously in the intercourse—will reap rewards in leadership and in extension of their fields of usefulness.

The ultimate aim is to give museum advantages to every individual, wherever he may live, but this will

require some further evolution of working methods. The immediate objective is to have a museum in every town. While small museums are thus establishing themselves, large museums may show comparable growth by developing branches to render adequate service to their great communities. Then with the cities and towns provided for, museum influence may begin to creep into the ramifications of rural life in America.

APPENDICES

APPENDIX A

CHARTER

A MUSEUM may be incorporated either under a general statute of the state or by special act of legislature. In either case the instrument of incorporation is called a *charter.*

Many charters contain provisions which might better be made by constitution. In many such cases, there is no constitution—rules of the corporation being set forth entirely in charter and by-laws. Although this is common practice, it involves certain practical difficulties. The charter, being cumbersome to amend, should be a stable document embodying only the basic data required by law. The constitution, being amendable by the corporation without legal formality, is a convenient instrument for stating matters which may have to be changed from time to time. The by-laws, which are employed to specify details, are never dispensed with.

The charter is a legal instrument the constitution and by-laws are administrative. Distinctions between constitution and by-laws remain to be discussed more fully in the following appendix.

CERTIFICATE OF INCORPORATION

A charter that is framed in accordance with a general statute is usually termed a *certificate of incorporation.* In its articles, the incorporators—who usually are to be the first trustees—certify to the character and purposes of the institution. The following suppositious articles are believed to embody the best features of many examples which have been studied. If circumstances under which the corporation is formed have special significance, they may be set forth in a preamble.

ARTICLES OF INCORPORATION

We, the undersigned, desiring to form a corporation not for profit, do hereby certify as follows:

1. The name of the corporation shall be . . .

2. The purpose of the corporation shall be to increase and diffuse knowledge and appreciation of history, art and science, and to that end to establish and maintain in the city of . . . a museum and reference library, to collect and preserve objects of historic, artistic and scientific interest, to protect historic sites, works of art, scenic places and wild life from needless destruction, to provide facilities for research and publication, and to offer popular instruction and opportunities for æsthetic enjoyment.

3. The corporation shall be located and its principal business shall be conducted in the city of . . .

4. The corporation shall have no capital stock.

5. All business and property of the corporation shall be managed by a board of nine elective trustees and two *ex-officio* trustees.

6. The subscribers hereto shall be elective trustees of the corporation for the first year, and shall have power to make and give effect to a Constitution and By-Laws of the corporation. The Constitution shall designate the *ex-officio* trustees.

7. The corporation may take and hold by gift, devise, bequest, purchase or lease, either absolute or in trust, any real or personal estate, necessary or proper for the purposes of its incorporation.

IN WITNESS WHEREOF, We have hereunto set our hands this day of , 19 .

(*Signatures*)

STATE OF
County of } ss.:

On this day of , 19 , before me personally appeared . . . (*names*) . . . , to me known to be the persons described in and who executed the foregoing certificate of incorporation, and severally duly acknowledged to me that they executed the same.

(*Seal*) (*Signature of notary*)

Article 7 is not essential since its provisions are made by law, but the number of charters in which it is included seems to indicate that it is deemed to have practical usefulness. Such other legal rights and duties of the corporation as to sue and be sued, to have and alter a seal, etc., are covered in the statute and are not usually rehearsed in the charter. Methods of management, qualifications, terms of office and mode of election of trustees and their powers and duties are subjects for the constitution and by-laws.

Corporation laws are somewhat different in each state. Therefore in putting these suggestions to use, legal advice should be sought, in order that the articles may be made to conform exactly to requirements.

ACT OF INCORPORATION

Relatively few museums are incorporated by special act of legislature, and it is felt that few need be so incorporated. If general statutes, do not provide adequately for museums, then efforts should be made to change the laws in the interest of all the museums in the state, rather than to seek special privilege for a single institution.

If, however, a special charter is secured, it should authorize support by the city and the county. For material upon which to base a bill, reference may be made to Chapter XIV and Appendix C of this Manual, as well as to the charter of the Staten Island Institute of Arts and Sciences (*Chap. 850 of the Laws of New York, 1911*).

APPENDIX B

CONSTITUTION AND BY-LAWS

THE constitution and by-laws of a corporation are the rules by which it is governed. The rules of different museums embody a variety of provisions and wordings but a framework of accepted practice is common to most of them. The following suggested forms are based upon a comparative study of many examples and are drawn up with special reference to the needs of small museums. In the body of this book mention is made of various practical considerations which have governed the drafting of these paragraphs, and which should be kept in mind if they are to be revamped. The chapters on organization, the board of trustees, the membership and personnel relations are especially important in this connection.

There is a radical difference between a constitution and by-laws—both being necessary. A constitution is intended to cover fundamental matters of principle; by-laws to add supplementary details. Since a constitution is basic, its integrity is safeguarded by the requirements that due notice be given and that a two-thirds vote at a meeting of the corporation be cast to amend it. However, by-laws are working rules that may require modification on short notice, and therefore they are amendable by a majority vote at any meeting of the board of trustees. Since new by-laws may be added by the trustees at any time, only the most necessary ones need be drafted at the outset.

Both constitution and by-laws should be as brief as practicable. Involved and prolix sections only add to the difficulty of use and amendment and the cost of printing. Matters of routine are better regulated by the board through rulings recorded on the minutes, than made a part of the formal rules.

It is convenient to divide the text into numbered paragraphs, called sections, and to bring together sections on related sub-

jects into numbered major divisions. By using two different terms, *article* and *chapter* for these major divisions of the constitution and by-laws respectively, much confusion may be avoided.

SUMMARY

CONSTITUTION

Article I. Name
" II. Object.
" III. Membership.
" IV. Management.
" V. Meetings.
" VI. Nominations and Elections.
" VII. Amendments.

BY-LAWS

Chapter I. Dues and Contributions.
" II. Duties of Officers.
" III. Duties of Committees.
" IV. Duties of Director.
" V. Financial Methods.
" VI. Amendments.

CONSTITUTION

ARTICLE I

Name

Section 1. The name of this Corporation shall be . . .

ARTICLE II

Object

Section 1. The object of the Museum shall be to increase and diffuse knowledge and appreciation of history, art and science.

ARTICLE III

Membership

Section 1. The membership of the Museum shall be composed of Active Members, Contributing Members, Sustaining Members, Donors, Patrons and Honorary Members.

Section 2. Active Members, Contributing Members, Sustaining Members, Donors and Patrons shall be persons elected to membership in consideration of dues, contributions or donations.

Section 3. Honorary Members shall be persons elected to membership in consideration of extraordinary service to the Museum.

ARTICLE IV

Management

Section 1. All business and property of the Museum shall be managed by a Board of Trustees composed of nine Trustees to be elected by the membership of the Museum, together with the Mayor and the Superintendent of Schools of . . . who shall be *ex-officio* Trustees.

Section 2. The nine elective Trustees shall each serve for three years or until a successor is elected, except that of the first Trustees three shall be elected to serve for one year, three for two years and three for three years. Thereafter all Trustees shall be elected for terms of three years, and three shall be elected and three retired each year.

Section 3. A President, a Vice-President, a Secretary and a Treasurer shall be elected annually by the Board of Trustees, and shall each serve for one year or until a successor is elected. These officers shall also be the officers of the Museum.

Section 4. Vacancy in any office shall be filled for the unexpired term by the Board of Trustees.

Section 5. No Trustee shall receive compensation from the Museum.

Section 6. There shall be at least two standing committees of the Board of Trustees, as follows: an Executive Committee and an Accession Committee.

Section 7. The Executive Committee shall consist of . . . Trustees serving with the officers. The President and Secretary shall be its chairman and secretary respectively.

Section 8. The Accession Committee shall consist of . . . Trustees serving with the President and Secretary, who shall be its chairman and secretary respectively.

Section 9. All committees of the Board of Trustees shall be appointed by the President and shall cease to exist at the call to order of the annual meeting of the Board.

Section 10. The Board of Trustees may elect a Director, and fix his compensation. The Director shall hold office during the pleasure of the Board.

Section 11. The Board of Trustees or the Executive Committee, upon recommendation of the Director may elect Honorary Curators, who shall serve until the next annual meeting of the Board.

Section 12. The Board of Trustees or the Executive Committee, upon recommendation of the Director, may elect salaried Curators, or in the same manner may remove them, provided that opportunity be given for a hearing before the Executive Committee.

Section 13. All other employees of the Museum shall be appointed and removed by the Director, and any who serve under a Curator shall be so appointed or removed only upon recommendation of the Curator.

ARTICLE V

Meetings

Section 1. The annual meeting of the Museum shall be held in January of each year at a time to be determined by the Board of Trustees, or at any time thereafter to which the said meeting may be adjourned.

Section 2. A special meeting of the Museum shall be called at any time by the Secretary upon order of the President, or upon written request of ten Members. No business may be transacted at a special meeting that is not specified in the call for the meeting.

Section 3. Notice of meetings of the Museum shall be mailed by the Secretary to all Members at least ten days prior to the date of the meeting.

Section 4. At meetings of the Museum ten Members shall constitute a quorum.

Section 5. Stated meetings of the Board of Trustees shall be held in January, April, July and October of each year. The stated meeting in January of each year shall be held after the annual meeting of the Museum and shall be regarded as the annual meeting of the Board.

Section 6. Special meetings of the Board of Trustees shall be called at any time by the Secretary upon order of the President, or upon written request of three Trustees.

Section 7. Reasonable notice of meetings of the Board of Trustees shall be given by the Secretary to all Trustees.

Section 8. At meetings of the Board of Trustees five Trustees shall constitute a quorum.

Section 9. Business may be transacted by the written assent of a majority of the Trustees, provided the proposed transaction has been submitted in writing to all the Trustees.

ARTICLE VI

Nominations and Elections

Section 1. Nominations for election to membership in the Museum may be made in writing to the Secretary by any Member of the Museum and shall be acted upon by the Board of Trustees or by a committee of the Board appointed for this duty.[1]

[1] This duty is usually a nominal one so far as memberships contingent upon dues are concerned. Honorary members are elected only after careful consideration.

Section 2. Nominations for election to the Board of Trustees shall be made by a committee of . . . Members of the Museum appointed by the President, of whom not more than . . . shall be Trustees, but any ten Members of the Museum may also make nominations. All such nominations in writing which reach the Secretary at least twenty-one days before the annual meeting of the Museum shall be incorporated in the final ticket. Only Members of the Museum in good standing shall be eligible for nomination.

Section 3. Election of Trustees shall be by ballot at the annual meeting of the Museum. Each Member of the Museum in good standing shall have one vote. In case of a tie vote the voting Members present at the annual meeting shall choose by ballot between the persons involved in the tie. The successful candidates shall enter upon duty at the adjournment of the meeting at which they are elected.

Voting for trustees by mail may be preferred to balloting at the annual meeting, in order to assure active participation in the affairs of a museum on the part of a larger number of members than would be likely to attend the meeting. To provide for this the following two sections may be substituted for Section 3:

Section 3. The final ticket of nominations to the Board of Trustees shall be printed and one copy mailed to each Member of the Museum who is entitled to vote at least ten days before the annual meeting of the Museum. It shall be accompanied by an envelope marked *Ballot*, in which the member shall return it to the Secretary.

Section 3a. At the annual meeting of the Museum, the polls shall be closed, the ballots counted and the results of the election announced. In case of a tie vote, the meeting shall proceed to choose by ballot between the persons involved in the tie. The successful candidates shall enter upon duty at the adjournment of said meeting.

Section 4. Any Trustee may be removed at any regular meeting of the Board of Trustees by a two-thirds vote of all the Trustees.

Section 5. Nominations for election to office shall be made by a Nominating Committee of the Board of Trustees appointed by the President.

Section 6. Election of officers shall be by ballot at the annual meeting of the Board of Trustees. The successful candidates shall enter upon duty at the adjournment of the meeting.

ARTICLE VII

Amendments

Section 1. This Constitution may be amended by a two-thirds vote of the Members present and qualified to vote at any meeting of the Museum, provided that notice of the purport of the proposed amendments shall have been mailed to all Members at least ten days prior to the date of meeting.

BY-LAWS

CHAPTER I

Dues and Contributions

Section 1. The dues of Active Members shall be . . . dollar(s) annually, of Contributing Members, . . . dollars annually and of Sustaining Members, . . . dollars annually.[1]

Section 2. Upon election each Active Member, Contributing Member or Sustaining Member shall pay dues for one year, except that the initial dues of a Contributing Member or Sustaining Member elected between July 1 and December 31 of any year shall be halved. Thereafter full dues shall be payable on January 1 of each year.

Section 3. Any Member one year in arrears of dues may be dropped from membership by the Board of Trustees.

[1] See discussion of memberships and dues—page 34.

Section 4. Any person who contributes . . . to the Museum in one payment shall be eligible for election as an Active Member for life.

Section 5. Any person who contributes . . . dollars to the Museum in one payment shall be eligible for election as a Donor. Any person who contributes . . . dollars to the Museum in one payment shall be eligible for election as a Patron.

Section 6. Any person shall be eligible for election as a Donor or a Patron who shall have given to the Museum books or objects for its collections or other property which shall have been accepted by the Board of Trustees and valued by the Board at twice the amount in money requisite to eligibility for election to the same degree.

CHAPTER II

Duties of Officers

Section 1. The President shall exercise general supervision of the affairs of the Museum, and shall preside at its meetings. He shall be chairman, *ex-officio*, of the Executive Committee and the Accession Committee, and a member, *ex-officio*, of all Committees except Nominating Committees.

Section 2. The Vice-President shall act for the President in his absence.

Section 3. The Secretary shall have charge of official records of the Museum except those specifically placed under the control of another officer, and shall keep a record of the membership of the Museum. He shall issue notices and keep minutes of all meetings of the Museum, of the Board of Trustees, of the Executive Committee and of the Accessions Committee, which shall be kept in books belonging to the Museum and shall be open to inspection of the Trustees and shall be subject to call by the Museum. He shall have custody of the corporate seal which he shall affix and attest as directed by the Board. He shall file any reports required by law.

Section 4. The Treasurer shall have custody of all funds and securities of the Museum, and shall receive and disburse moneys under the direction of the Board of Trustees. He shall keep records of the financial condition of the Museum and of the financial relations of Members to the Museum, and shall make a full report at the annual meeting of the financial condition of the Museum and of receipts and disbursements of the preceding year. The accounts of the Treasurer shall be kept in books belonging to the Museum which shall be open to inspection of the Trustees and shall be subject to call by the Museum.

CHAPTER III

Duties of Committees

Section 1. The Executive Committee shall have control of the property of the Museum, and shall have general power to conduct the business of the Museum, subject to approval of the Board of Trustees. It shall meet regularly each month and may hold special meetings on call. Four members of the Committee shall constitute a quorum.

Section 2. The Accession Committee shall pass upon recommendations of the Director relating to additions to or removals from the collections—whether temporary or permanent. It shall have authority to make commitments from funds appropriated by the Board or the Executive Committee for purchase of material for the collections. It shall meet regularly each month and may hold special meetings on call. Three members of the Committee shall constitute a quorum.

Section 3. Any Committee may transact business by the written assent of its members.

CHAPTER IV

Duties of Director

Section 1. The Director shall be the chief administrative officer of the Museum. Acting under the authority and

control of the President and the Board of Trustees, he shall have direction and control of all operations of the Museum. He shall be the official medium of communication between the Board or its committees, and the staff.

Section 2. The Director shall attend all meetings of the Museum, of the Board of Trustees, and of all Committees except the Nominating Committee, unless excused or otherwise ordered by the Board. He shall not be a member of the Board.

Section 3. The Director shall submit to the Board of Trustees, at the annual meeting, a report reviewing the work of the Museum for the previous year. He shall present at any regular or special meetings such other reports and recommendations as he may deem advisable or as the Board may require.

CHAPTER V

Financial Methods

Section 1. No pecuniary obligation shall be contracted without sanction of the Board of Trustees specifically or by adoption of a budget.

Section 2. No bills shall be paid unless approved by the Director.

Section 3. The Treasurer shall be bonded by the Museum with two good sureties or in a reliable bonding organization in the sum of $ . . . for the faithful performance of his duties and the safe keeping of funds of the Museum. He shall not deposit funds of the Museum in any name except that of the Museum and he shall not invest funds of the Museum without authority of the Board of Trustees or the Executive Committee. His accounts shall be balanced as of December 31 of each year, and audited by a Certified Public Accountant or an Auditing Committee of the Board of Trustees.

CHAPTER VI

Amendments

Section 1. These By-laws may be amended at any stated meeting of the Board of Trustees by a majority vote of the Trustees present provided that notice shall have been given at the previous stated meeting of the Board.

APPENDIX C

CONTRACT WITH LOCAL GOVERNMENT

MANY museums occupy city-owned buildings located on public land. In fact a plan which has come to be looked upon as the ideal one is that under which the city erects a museum building, financed by bond issue, and leases it to the museum corporation without rent and with provision for maintenance. Doubtless there are conditions under which this arrangement would not be satisfactory, but for most communities it is believed to offer a favorable solution of the museum's building problem and an appropriate investment of public capital. However, the advantages of this arrangement are conditioned by the terms under which it is made. Customarily these are defined by contract between the local government and the museum.

The agreement between the Department of Public Parks of the City of New York and The American Museum of Natural History may be cited as an example which has proven satisfactory over a long period. Firstly, it grants the museum use of a building so long as the terms of contract are observed. Secondly, it relieves the city of responsibility for damage by fire, but commits the city to the making of certain other repairs to the building. Thirdly, it assures the museum exclusive occupancy. Fourthly, it specifies conditions under which the public is to be admitted to exhibitions, and gives special privileges to teachers. Fifthly, it states that the title to the building shall be held always by the city, and the title to the museum material therein, by the museum. Sixthly, it requires an annual accounting to the city. Seventhly, it gives the city police power in the building *but places the power to appoint and remove museum employees in the hands of the museum.* Eighthly, it permits the museum to vacate the building upon proper notice to the city, and empowers the city to dispossess the museum if the latter does not abide by

its contract. Ninthly, it provides for cancellation of the agreement by mutual consent. The text of the contract is printed here by permission.

By way of comment, it may be observed that the seventh provision is an essential one. The second seems to call for some strengthening, since precedent in many cities makes the government squarely responsible for all ordinary repair of the building and structural equipment. While no provision is made for annual appropriations from tax funds to meet the cost of cleaning and guarding the building, such appropriations are made regularly in the city under discussion and elsewhere. This established practice might very properly be recognized in the contract.

As noted in preceding chapters, local and county support is given to the educational work of many museums. However, appropriations for any purpose not immediately related to the occupancy of land and building are not to be touched upon in a contract of the sort under discussion. In fact they are not known to be covered by contract at all—being regulated instead by precedent and the judgment of governmental authorities.

THE CONTRACT

THIS AGREEMENT, made and concluded on the twenty-second day of December, in the year one thousand eight hundred and seventy-seven, between the DEPARTMENT OF PUBLIC PARKS OF THE CITY OF NEW YORK the party of the first part, and the AMERICAN MUSEUM OF NATURAL HISTORY, party of the second part, witnesseth:

Whereas, by an Act of the Legislature of the State of New York, passed April 22, 1876, entitled "An Act in relation to the powers and duties of the Board of Commissioners of the Department of Public Parks, in connection with the American Museum of Natural History, and the Metropolitan Museum of Art," the said party of the first part is authorized and directed to enter into a contract with the said party of the second part, for the occupation

by it of the buildings erected or to be erected on that portion of the Central Park in the City of New York, known as Manhattan Square, and for transferring thereto and establishing and maintaining therein its museum, library and collections, and carrying out the objects and purposes of said party of the second part; and,

Whereas, a building contemplated by said act has now been erected and nearly completed and equipped in a manner suitable for the purposes of said Museum, as provided in the first section of the Act of May 15, 1875, known as Chapter 351, of the Laws of 1875, for the purpose of establishing and maintaining therein the said Museum, as provided by the said last named act, and by the Act of April 5, 1871, known as Chapter 290, of the Laws of 1871; and,

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its museum, library and collections, and carry out the objects and purposes of the said party of the second part;

Now, therefore, it is agreed by and between the said parties as follows, namely:

First.—That the said party of the first part, has granted and demised and let, and doth, by these presents, grant, demise and let, unto the said party of the second part, the said buildings and the appurtenances thereunto belonging, to have and to hold the same so long as the said party of the second part shall continue to carry out the objects and purposes defined in its charter; or such other objects and purposes as by any future amendment of said charter may be authorized; and shall faithfully keep, perform, and observe the covenants and conditions herein contained on its part to be kept, performed and observed, or until the said building shall be surrendered by the said party of the second part, as hereinafter provided.

Secondly.—That neither the party of the first part, its successor or successors, nor the Mayor, Aldermen and Com-

monalty of the City of New York, shall be in any manner chargeable or liable for the preservation of the said building or the property of the party of the second part which may be placed therein, against fire, or for any damage or injury that may be caused by fire to the said property; but it is agreed that, damages as aforesaid excepted, the said party of the first part will keep said building from time to time in repair.

Thirdly.—That as soon after the completion and equipment of said building as practicable, said party of the second part shall transfer to, and place and arrange in said building, its museum, library and collections, or such portion thereof as can be properly displayed to the public therein, and shall have and enjoy the exclusive use of the whole of said building, subject to the provisions herein contained, and the rules and regulations herein prescribed, during the continuance of the term granted, or until a surrender thereof, as herein provided.

Fourthly.—That the exhibition halls of said building shall, on Wednesday, Thursday, Friday and Saturday of each week, and on all legal or public holidays, except Sunday, be kept open and accessible to the public, free of charge, from nine o'clock A.M. until half an hour before sunset, under such rules and regulations as the party of the second part shall from time to time prescribe; but on the remaining days of the week the same shall be only open for exhibition to such persons, upon such terms as the said party of the second part shall from time to time direct. But all professors and teachers of the public schools of the City of New York, or other institutions of learning in said city, in which instruction is given free of charge, shall be admitted to all the advantages afforded by the said party of the second part, through its museum, library, apparatus, and collections, or otherwise, for study, research and investigation, free of any charge therefor, and to the same extent and on the same terms and conditions as any other persons are admitted to such advantages as aforesaid.

Fifthly.—That the museum, library, and collections, and

all other property of said party of the second part, which shall or may be placed in said building, shall continue to be and remain absolutely the property of said party of the second part, and neither the said party of the first part nor the said the Mayor, Aldermen and Commonalty, shall by reason of said property being placed in said building, or continuing therein, have any right, title, property or interest therein; nor shall the said party of the second part, by reason of its occupation and use of said building under this agreement, acquire, or be deemed to have any right, title, property or interest in said building, except so far as expressly granted by this agreement.

Sixthly.—That the said party of the second part shall, on or before the first day of May, in every year, during the continuance of this agreement, submit to the said party of the first part, its successor or successors, a detailed printed report of the operations and transactions of the said party of the second part, and all its receipts and payments, for the year ending with the 31st day of December next preceding.

Seventhly.—That said party of the first part shall have, at all times, access to every part of the said building for general visitation and supervision, and also for the purpose of the performance of the duties devolved upon it by the laws of the State of New York, or of the City of New York. That the police powers and supervision of said party of the first part shall extend in, through and about said building. That the said party of the second part may appoint, direct, control and remove all persons employed within said building, and in and about the care of said building, and the museum, library and collections therein contained.

Eighthly.—That said party of the second part may, at any time, after the expiration of three, and before the expiration of six, months from the date of the service of a notice in writing to said party of the first part, its successor or successors, or the Mayor of the City of New York, of its intention so to do, quit and surrender the said premises and remove all its property therefrom; and upon and after

such notice, the said party of the second part shall and will, at the expiration of the said six months, quietly and peaceably yield up and surrender unto the said party of the first part and its successors all and singular the aforesaid demised premises. And it is expressly understood and agreed by and between the parties hereto that if the said party of the second part shall omit to do, perform, fulfill or keep any or either of the covenants, articles, clauses and agreements, matters and things herein contained, which on its part are to be done, performed, fulfilled or kept, according to the true intent and meaning of these presents, then and from thenceforth this grant and demise shall be utterly null and void. And in such case it shall and may be lawful for said Department to serve or cause to be served on the said party of the second part a notice in writing declaring that the said grant hereinbefore made has become utterly null and void and thereupon the said party of the first part, its successor or successors (ninety days' time being first given to the said party of the second part to remove its property therefrom), may re-enter, and shall again have, repossess and enjoy the premises aforementioned, the same as in their first and former estate, and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything here contained to the contrary notwithstanding.

Ninthly.—And it is further expressly understood and agreed, by and between the parties hereto, that this agreement may be wholly cancelled and annulled, or, from time to time, altered, or modified, as may be agreed, in writing between the said parties, or their successors, anything herein contained to the contrary in any wise notwithstanding.

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary, pursuant to a resolution of the Board of Commissioners of said Department, adopted at a meeting held on the thirtieth day of January, in the year of our Lord one thousand eight hundred and seventy-eight and the said

party of the second part hath caused the same to be executed by their President, and their official seal affixed thereto, pursuant to a resolution of the Trustees of the American Museum of Natural History, adopted at a meeting held on the twelfth day of February, in the year of our Lord one thousand eight hundred and seventy-seven.

APPENDIX D

LAWS OF THE VARIOUS STATES RELATING TO SUPPORT OF MUSEUMS, ART GALLERIES AND HISTORICAL SOCIETIES BY COUNTY OR MUNICIPAL AUTHORITIES

THE compilation which forms the basis of this appendix was made by the Legislative Reference Section of the New York State Library. Thanks are due William E. Hannan, Legislative Librarian, who has given much help and counsel, and to Ruth Montgomery and Elisabeth F. Makin who prepared the report. The author has added the short summaries to facilitate perusal.

In addition to the general legislation here quoted, there are many special, or private, acts each of which applies to one institution only. To find them, one would be obliged to consult the indexes to unconsolidated laws, year by year, from 1777 to the present time.

It is felt that *special* state legislation need not be encouraged. The first requirement is the adoption in each state of a general act comparable to the most recent and very short one of Ohio (*Laws 1925*). Somewhat too specific are the California act (*Statutes 1923*), the Illinois act (*Revised Statutes 1921, p. 2524*) and the Indiana act (*Statutes 1921*), although in general they are framed along lines which a model bill would follow. The other acts either apply to a part of the field—favoring historical societies or art galleries, for example—or are deemed to be out of keeping with best practice.

CALIFORNIA

Summary—Any city or county may purchase or lease lands for museum purposes, including erection of buildings, under such terms as the city or county may determine.

A county may establish, maintain and promote the inter-

ests of a museum devoted to the acquisition, exhibition and utilization of objects of science, art or history. It may acquire real and personal property necessary for housing and exhibition of the material, and for management, and it may acquire and dispose of museum material. It may acquire and maintain a library, conduct lectures and hold meetings, promote research, provide instruction, cooperate with educational institutions, issue publications and employ a museum staff. Any county in which a museum is established under this act may become associated with organizations for the advancement of museum interests, and may send a representative to any meeting of any such organization.

Section 1. Any municipal corporation, county, or city and county in this state is hereby authorized and empowered to acquire and hold by purchase or otherwise, or by lease, lands situated within the limits thereof, for a term not exceeding fifty years, for the purpose of developing and encouraging agricultural, horticultural, or botanical products and for exhibiting the same, or for the purpose of erecting, rebuilding or furnishing historical museums or art galleries thereon under such terms and conditions as may be approved by the city council, board of trustees, or other legislative body of such municipal corporation, or by the board of supervisors of such county or city and county. (California. General Laws 1920, pt. 2, 1901.)

Section 1. The board of supervisors of any county may by ordinance declare its intention to establish and maintain a museum of history, science and art, or of one or more of such similar objects, under the provisions of this act. After such ordinance has taken effect the board of supervisors shall have and may exercise any or all of the powers in this act provided, either directly or by agents under its direction and control, and any other power necessary and proper to promote the objects and purposes of a museum as an institution devoted to the acquisition, exhibition and utilization of scientific, artistic, historical or similar illustrative material.

Section 2. Such board of supervisors shall have power to acquire real and personal property necessary properly to house and care for the exhibits and materials placed in such museum, and for the management of the same.

Section 3. Such board of supervisors shall have power to acquire and maintain a library in furtherance of the objects of the museum.

Section 4. Such board of supervisors shall have power to purchase, collect, trade or exchange for, or otherwise acquire exhibition or study material proper or necessary for the use of the museum and may sell, loan or exchange such material acquired by it, according to the established custom of museums.

Section 5. Such board of supervisors shall have power to conduct lectures, entertainments and receptions and hold meetings in furtherance of the interests of the museum for the purpose of acquainting the public with material or exhibitions in the museum, or in order that the educational advantages offered by the museum may be widely distributed.

Section 6. Such board of supervisors may conduct or assist study, investigation or research in any department established by such museum.

Section 7. Such board of supervisors may conduct special or technical schools or institutes for instruction in any of the matters pertaining to or connected with the museum and may charge such fees as may be necessary to defray the cost of such instruction.

Section 8. Such board of supervisors may cooperate with other governmental agencies, with universities, colleges, technical schools, societies or individuals in the advancement of learning in the arts and sciences.

Section 9. Such board of supervisors may publish documents pertaining to the work of the museum and may sell or exchange or distribute the same without charge.

Section 10. Such board of supervisors may employ such curators, attendants or other persons as may be necessary to conduct such museum and carry out the powers granted by this act.

Section 11. Any county in which a museum has been established and is being maintained under this act may become associated with other governmental agencies, associations, societies or persons in any society, association or conference the purpose of which is the promotion of museums and the objects advanced by museums, and its board of supervisors may send a representative to any meeting of any such society, association or conference. (California. Statutes 1923, ch. 24, p. 43–44.)

COLORADO

Summary—Any county may create a local branch of the state historical society and may assist in maintaining it, or any similar organization, by giving it the use of rooms in the county house and by providing equipment for the preservation and exhibition of material. The county is to have title to material but the society is to be given custody and supervision of it. Finances are to be controlled jointly by the secretary of the society and the chairman of the board of county supervisors.

Sec. 8235. Each county is authorized, through its board of county commissioners, to create and maintain a county unit, tributary to the state society, and having in view the same objects as the state society.

Sec. 8236. Whenever there shall be organized in any one of the several counties, a patriotic society to promote these objects and composed of members of character and standing, whether called an early settlers society, or by some other name, it shall be the duty of the executive officers of said county, to permit the use of room, or rooms, in the court house for its meetings, and otherwise; Provided, Such use shall

not interfere with the usual and legitimate purpose of such room, or rooms.

Sec. 8237. The executive officials of the county shall provide suitable room and furniture for the safe keeping and exhibition of the collection of the county unit, or society, as in their judgment may seem proper; and shall pay the cost of same from the general fund from any moneys not otherwise appropriated.

Sec. 8238. While the collection and supervision of this county library, museum and curio collection, here authorized, shall be intrusted to a patriotic society, united for the purpose, the title to all property thus accumulated shall be in the executive officers of the county where located, and their successors in office.

Sec. 8239. The secretary of the patriotic society in charge shall be the custodian of all property of the county unit, or society. The secretary of the county unit and the chairman of the board of county commissioners shall be a board to control the finances and to make needed purchases. The patriotic society in charge shall incur no debt.

Sec. 8240. To bind and preserve copies of newspapers published in the county where located; to preserve manuscripts and photographs of local interest; to procure a copy, or copies of all books pertaining to the Rocky Mountain country and especially to preserve to the fullest extent possible the history of our soldiers in the recent world war shall be a prime object of each county society, and payment for the same shall be made by the county commissioners from the general fund of the county at their discretion.

Sec. 8241. It shall be the duty of the secretary-custodian of every county unit, taking advantage of this act, to report from time to time to the state historical and natural history [society] of Colorado, matters which relate to the historical development of that county, or of the state; and also immedi-

ately after December 1, of each biennial period, to make a full report of the transactions of the county society for the preceding biennial period, including therein a report of the financial transactions and of the historical, and other material accumulated during that time. Such report shall be transmitted, in full, or in condensed form by the state historical and natural history society of Colorado with its report to the governor. (Colorado. Compiled Laws, 1921, p. 2107.)

ILLINOIS

Summary—Any county, city, town or village may appropriate for historical society research, publication and marking of sites.

Any city or park district may purchase or erect and may maintain a building for a museum of arts and sciences within any park under its control. It may permit the trustees of a museum to erect and maintain a building within a park, and it may contract with the trustees of a museum in regard to maintenance, provided that the museum fulfill certain specified requirements. For the maintenance of such a museum the board of park commissioners may levy an annual tax of ⅓ mill on each dollar of taxable property in the park district, provided that authority shall have been given by popular vote.

Any county, city, town or village may order the originals of public documents to be transferred to specified state organizations or to a local historical society and may make appropriations to carry these provisions into effect.

Section 67. Sec. 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That the several counties, cities, towns and villages in this State acting through their constituted authorities, shall have power to encourage and promote historical research within their respective jurisdiction by making reasonable appropriations for the publication of the proceedings of and such papers and other documents of historic interest as may be furnished by any historic or other society engaged in historic research, and

for ascertaining and marking the location of ancient forts, villages, missions, military encampments, habitations of aborigines and other places of historic interest, and to provide for the manner in which and the purpose for which such appropriations shall be expended.

Section 68. Sec. 2. The authorities of such counties, cities, towns and villages having so undertaken the publication of the proceedings, papers and documents mentioned in the first section of this Act shall have the power to cause the same to be printed or published in book or pamphlet form and to provide for the sale thereof at such prices as in their judgment will reimburse the cost of publication. (Illinois. Revised Statutes 1921, p. 2182–83.)

Section 369. Sec. 1. That the corporate authorities of cities and park districts having the control or supervision of any public park or parks, are hereby authorized to purchase, erect and maintain within any public park, under the control or supervision of such corporate authorities, edifices to be used as museums for the collection and display of objects pertaining to natural history or the arts and sciences, or to permit the directors or trustees of any museum devoted to either of the purposes aforesaid to erect and maintain its museum or museums within any public park now or hereafter under the control of supervision of any city or park district, and to contract with the directors or trustees of any such museum or museums relative to the erection and maintenance thereof. Such cities and park districts may charge, or permit such museums to charge an admission fee, not to exceed 25 cents for each visitor over ten years of age and not exceeding 10 cents for each visitor of ten years of age, or under, the proceeds of such admission fee to be devoted exclusively to the maintenance of such museum: Provided, that all such museums shall be open to the public without charge for three days each week, and to the children in actual attendance upon any of the schools in this State at all times. If any owners or owner of any lands or lots abutting or fronting on any such public park, or adjacent thereto, have any private right, easement,

interest or property in such public park appurtenant to their lots or lands or otherwise, which would be interfered with by the erection and maintenance of any museum as hereinbefore provided, or any right to have such public park remain open or vacant and free from buildings, the corporate authorities of the city or park district having control of such park, may condemn the same in the manner prescribed in an Act of the General Assembly entitled, "An Act to provide for the exercise of the right of eminent domain," approved April 10th, 1872, in force July 1st, 1872, and the amendments thereto."

Section 370. Sec. 2. That any board of park commissioners, having control of a public park, within which there shall be maintained any museum or museums of art, sciences or natural history, under the provisions of this Act, is hereby authorized to annually levy a tax (in addition to all other taxes authorized by law) of one-third of one mill on each dollar of taxable property embraced in said district, according to the valuation of the same as made for the purpose of State and county taxation by the general assessment last preceding the time when such one-third of one mill tax shall be levied for the purpose of maintaining and caring for such museum or museums and the buildings and grounds thereof; and the proceeds of such additional tax shall be kept as a separate fund: Provided, the proposition to annually levy a tax as herein authorized shall first be submitted to a vote of the legal voters of such park district and receive a majority of the votes cast upon such proposition. (Illinois. Revised Statutes 1921, p. 2524.)

Section 19. Sec. 1. The board of supervisors or board of county commissioners, as the case may be, of every county, and the city council or board of trustees of every city, town or village in this State may, by order or resolution, authorize and direct to be transferred to the Illinois State Historical Society, the Illinois State Historical Library or to the State University Library at Urbana, Illinois, or to any historical society duly incorporated and located within their respective counties, such official papers, drawings, maps, writings and

records of every description as may be deemed of historic interest or value, and as may be in the custody of any officer of such county, city, or village. Accurate copies of the same when so transferred shall be substituted for the original when in the judgment of such county board, city council or board of trustees the same may be deemed necessary.

Section 20. Sec. 2. It shall be the duty of the officer or officers having the custody of such papers, drawings, maps, writings and records to permit search to be made at all reasonable hours and under their supervision for such as may be deemed of historic interest, and whenever directed by the board of supervisors or county board, city council or board of trustees of such county, city, town or village in the manner prescribed in the foregoing section to deliver the same to the trustees, directors or librarian or other officer of the library or society designated by said board of supervisors or county board, city council or board of trustees, as the case may be.

Section 21. Sec. 3. The board of supervisors, county board, city council and board of trustees of the several counties, cities, towns and villages in this State shall have the power to make reasonable appropriations from their respective revenues for the purpose of carrying the provisions of this Act into effect. (Illinois. Revised Statutes 1921, p. 3258.)

INDIANA

Summary—Upon petition of a local historical society and fifty taxpayers any county may appropriate $5,000 or less for the construction and equipping of quarters for the society, provided that the society has been in existence for at least five years and has fulfilled specified requirements. Such quarters are either to be provided in connection with the county courthouse or constructed upon land belonging to the county. They are to be owned and maintained by the county. The quarters may be used jointly by more than one society or may be passed on from one society to another.

The county may employ a curator upon recommendation

of the historical society, and the society shall prescribe his duties. The salary shall not exceed $75 a month.

The county may also appropriate for publication of catalogs and papers an amount which, together with the curator's salary, shall not exceed $1,500 each year.

In any city of 100,000 or more inhabitants, which has an art association that is incorporated not for profit and is organized for the purpose of maintaining an art gallery, the school authorities shall pay annually ¼ mill per dollar of taxables, provided that such association has fulfilled certain specified requirements and has duly certified to the facts. If more than one association should qualify under the act, one association designated by the mayor and the school authorities shall receive the public support.

Section 4998. (5037a.) 1. That in any county of the state of Indiana where there now is or may hereafter be a historical society, or local branch of a historical society which, at the time of making petition, shall have maintained its organization and have been actively engaged in the collection of data and material for, and in the preservation of county and state history and biography, for a period of not less than five consecutive years, during which it shall have held at least one meeting in each year at which papers shall have been read and addresses made, in the presence of the public, upon matters connected with the history of the county and state, the county council of such county may, upon the petition of the president and secretary of such historical society and not less than fifty voters and taxpayers of the county, having been presented to the county commissioners, at a regular session of the board, and by the commissioners referred to the county council at a regular or called session thereof, with estimates and recommendations as to amounts of such appropriation, or appropriations, as provided for in section nineteen (19) of an act entitled an act concerning county business, approved March 3rd, 1899, appropriate out of any moneys in the county treasury, not otherwise appropriated, a sum, or sums of money not to exceed in the aggregate five thousand dollars ($5,000) for

the construction and furnishing of rooms and fireproof vaults for the meetings of such historical society and for the preservation of the records of such society and historical papers, souvenirs and natural history collections. Such sum of five thousand dollars or less, to be appropriated at one time or at various sessions of the county council; such rooms and vaults to be provided in connection with county courthouses or constructed separately upon land belonging to the county and to be the property of the county. Such rooms and vaults to be built and maintained for the purposes enumerated in this act by the county commissioners and under their supervision as provided in section thirty-one (31) of an act entitled an act concerning county business, approved March 3rd, 1899.

Section 4999. (5037b.) 2. Should the historical society for which and upon whose petition such rooms and vaults shall have been provided by the county, as prescribed in this act, fail or voluntarily surrender to the county its rights and privileges thereto, or discontinue its meetings for a period of two consecutive years, all its papers, records, collections of every kind and furniture shall become the property of the county, and the county commissioners shall provide for the safe keeping of the same before subjecting the rooms or vaults to other uses of or by the county; but this provision shall not be so construed as to prevent persons who shall have contributed papers or historical or biographical data from making copies thereof for their own private use and profit.

Section 5000. (5037c.) 3. Should there at any time be more than one reputable historical society, devoted to some branch of historical or biological investigations in any county in which such rooms and vaults or permanent buildings as are provided for in this act shall have been built, it may be admitted to their use upon such conditions, to be determined by the county commissioners, as shall not interfere with the rights and privileges of the original society; but appropriations of money shall be made only for one set of rooms and vaults or separate buildings for such purposes in the county.

Section 5001. (5037d.) 4. Such rooms, or buildings and vaults, as may be constructed in any county of the state of Indiana, under the provisions of this act shall be under the joint control of the historical society for the uses of which they shall be constructed, and its legitimate successors, and the board of county commissioners under such rules as they may, by their concurrent action, establish; but such historical society or societies shall alone be responsible for all bills for printing, publication, stationery, records and other expenses of every kind incurred in the prosecution of its or their work, except such costs for the construction and maintenance of the rooms or buildings and vaults as are heretofore provided for in this act.

Section 5002. (5037e.) 5. Upon or after the forfeiture or voluntary surrender of the occupancy of the rooms or buildings and vaults to the county by the historical society for which they were constructed, the county commissioners may place them in charge of another society organized for similar purposes as the original society, if such society exists in the county, or shall be organized to the satisfaction of the board; but preference shall be given to a resumption of the old society, or a reorganization thereof, and any society that shall accept the use and care of the property and occupancy of the rooms or buildings and vaults, shall be accountable to the county for the same and they shall continue to be the property of the county as in the first case. The purposes of this act being to create and perpetuate a system for the collection and preservation of local and general history, making a record of the progress of the several counties of the state, and providing permanent nuclei for individual and family history and local observation of natural phenomena. (Indiana. Statutes 1914, Vol. 2, pp. 870–871.)

Sec. 5002a. 1. The board of county commissioners of any county of this state, in which there is, or hereafter may be, a historical society, having a collection of records, papers and other objects of historical interest, and occupying there-

with a room or rooms under the act to which this act is supplemental, may employ a curator whose duties shall be such as may be prescribed by the historical society. The person who shall be appointed curator shall be a person recommended by the historical society.

Sec. 5002b. 2. The compensation of the curator shall be fixed by the board of county commissioners, upon the recommendation of the historical society, but shall not exceed seventy-five dollars ($75) per month. For the purpose of paying the curator's salary and printing catalogues of the objects of historical interest, constituting the collection of the society, and for printing such papers of historical interest, as the society may direct, the county council may appropriate from the county funds fifteen hundred dollars ($1500) each year, which shall be disbursed for the purposes specified in this section upon the orders of the board of county commissioners made upon reports of this historical society.

Section 3 of the above act provides that the act be in force and effect from and after its passage.

(Indiana. Annotated sup. v. 5, p. 571.)

Section 8861e1. Art associations, aid by first class cities—1. That in any city having more than one hundred thousand inhabitants according to the last preceding United States census wherein there now is or hereafter shall be an art association which is incorporated under the laws of the State of Indiana without stock and without purpose of gain to its members, but organized for the purpose of maintaining a permanent art gallery in said city and encouraging and promoting education in the fine and industrial arts and which owns buildings, grounds, works of art and other proper equipment for the study of art in said city, it shall be the duty of the school city of such city and of the board of school commissioners of such city, if any, to pay such art association annually in quarterly installments a sum equal to one-quarter of one cent on each one hundred dollars of the taxables of said city as valued on the tax duplicate for the next year before the date of each

such payment provided such art association has, by proper resolution, adopted by its board of directors or other governing body, accepted all the provisions of this act and filed a certified copy of such resolution with said school city or board of school commissioners of said city prior to the date of any such payment.

Section 8861f1. School officers board of visitors.—2. No such art association shall be entitled to receive any of the payments so hereinabove provided for until it, by a proper resolution adopted by its board of directors or other governing body, shall have tendered so said school city, or board of school commissioners (1) the right to appoint the superintendent of the common schools of said school city and the director of art instruction of said school city if any such there be, as visitors having the privilege of attending all meetings of the board of directors or other governing body of said art association to the end that they may be advised as to the work done and proposed to be done by said association; (2) the right to nominate for membership in such board of directors or other governing body persons of whom at least two shall be elected; (3) the right of free admission for all school children and teachers of said school city to its museum and galleries and to not fewer than fifty lectures annually on the fine and applied arts; (4) the right to use at all reasonable times and in all reasonable ways the association's plant, equipment and facilities for education in art, consistently with their use by such association and in connection therewith the right to use at all reasonable times and in all reasonable ways, under the association's direction, its executive and teaching staffs consistently with their established duties to the association; (5) normal instruction in the fine and applied arts which at half the regular rates charged by said association for like instruction may be availed of by all teachers under the jurisdiction and employment of said school city or board of school commissioners; (6) the loan to such school city or board of school commissioners from the association's collection and equipment of suitable and available works of art, reproduc-

tions and photographs for temporary exhibitions in the city's schools to aid and supplement the teaching in such schools; (7) and such exhibitions in its museums as will supplement and illustrate the work of the school children and teachers under the authority and jurisdiction of said school city or board of school commissioners. A copy of said resolution duly certified by the president and secretary of the said art association shall be filed in the office of the school city or of the board of school commissioners as a condition precedent to the receipt by the association of any such payments.

Section 8861g1. Acceptance of provisions.—3. In any city such as is designated in the first section of this act, wherein there now is or hereafter shall be an art association which is incorporated and organized in the manner and for the purpose stated in the first section of this act, and which owns buildings, grounds, works of art or other proper equipment for the study of art in said city, it shall be the duty of the said city to pay such art association annually in quarterly installments a sum equal to one-quarter of one cent on each one hundred dollars of taxables of said city as valued on the tax duplicate of said city for the year next before the date of each such payment provided such art association has, by a proper resolution adopted by its board of directors or other governing body, accepted all the provisions of this act and filed a certified copy of said resolution with the comptroller of said city prior to the date of any such payment.

Section 8861h1. Mayor and comptroller to attend meetings. —4. No such art association shall be entitled to receive any of the payments provided for in section 3 until such art association, by a proper resolution adopted by its board of directors or other governing body, shall have granted to the mayor and the comptroller of said city the right to attend all the meetings of the board of directors or other governing body of said art association to the end that the said city may at all times be advised as to the work done and proposed to be done by said art association and the right to nominate for mem-

bership in such board of directors or other managing body persons of whom at least two shall be elected; and, as further consideration for the benefits to be received from said city by reason of such payments, shall have granted to all the inhabitants of said city the right to be admitted free to its museum and art galleries each Saturday and Sunday during the usual hours. A copy of such resolutions duly certified by the president and secretary of the art association shall be filed with the comptroller of said city as a condition precedent to the receipt by the association of any such payments.

Section 8861ii. Resolutions in force.—5. After any such art association shall have once filed respectively with the school city or board of school commissioners and with the city comptroller the resolution hereinabove provided for, it shall not be required to renew the same from year to year but each such original resolution shall continue and remain in force for the purposes named until by like resolution likewise certified and filed any such original resolution shall be revoked or rescinded.

Section 8861jj. Agreement in force.—6. So long as any such art association shall do and perform all and singular the things by it so agreed to be performed as considerations for the benefits to be received by it under this act, or shall continue to be able, willing and ready to perform the same, it shall be entitled to receive the said several payments herein provided for.

Section 8861kk. One association to participate, how chosen. —7. If at any time it shall transpire that in any city such as is designated in the first section of this act more than one art association such as is designated in that section shall have qualified as hereinbefore required to perform the several public services in this act mentioned nevertheless the moneys in this act authorized and directed to be paid by said city and by said school city shall be paid to but one of such associations. In such event the particular association to which said moneys shall be paid shall be the one selected by both the mayor of said city and by the managing body of said school city by formal corporate action, as the association best qualified and

equipped to perform and render said several public services. Nothing in this act shall be construed as limiting the power of the general assembly to repeal this act at any time. (Indiana. Statutes, Supp. 1921. Vol. 6, p. 1759–1761).

IOWA

Summary—County library trustees are authorized to provide for county historical society collections.

A city of 50,000 or greater population may establish and maintain a public art gallery. It may purchase or rent buildings and employ staff. The mayor shall appoint trustees who shall serve under specified conditions and shall have certain powers and duties that are laid down in the law. Any such gallery may make contracts with existing art schools or other art organizations for joint care or use of the gallery. The city may appropriate each year, for purposes of the gallery, not to exceed 5% of the general fund.

Section 3755. Whenever a local county historical association shall be formed in any county having a free public library, the trustees of such library are hereby authorized to unite with such historical association and to set apart the necessary room and to care for such articles as may come into the possession of said association; said trustees are also authorized to purchase necessary receptacles and materials for the preservation and protection of such articles as are in their judgment of a historical and educational nature and pay for the same out of the library fund. (Iowa. Compiled Code 1919, p. 1128).

Sec. 1. Cities acting under special charter having a population of fifty thousand (50,000) or more may provide for the establishment and maintenance of a municipal art gallery which, under proper regulations, shall be open to the use of the public, and may purchase, erect, or rent buildings or rooms or use any available property belonging to such city, suitable for this purpose, and provide for the compensation of necessary employees.

Sec. 2. In any city in which a municipal art gallery has been established, there shall be a board of art trustees consisting of five, seven or nine members to be appointed by the mayor, by and with the approval of the city council, which shall also establish by ordinance the number to be appointed.

Sec. 3. Of such trustees so appointed on boards to consist of nine members, three shall hold office for two years, three for four years, and three for six years; on boards tc consist of seven members, two shall hold office for two years, two for four years and three for six years; and on boards to consist of five members, one shall hold office for two years, two for four years and two for six years, from the first day of July following their appointment in each case. At their first meeting they shall cast lots for their respective terms and report the result of such lot to the council. All subsequent appointments, whatever the size of the board, shall be for terms of six years each, except to fill vacancies.

Sec. 4. Only bona fide citizens and residents of the city or town, male or female, over the age of twenty-one years, shall be eligible to membership.

Sec. 5. The removal of any trustee permanently from the city, or his absence from six consecutive regular meetings of the board, except in case of sickness or temporary absence from the city, without due explanation of absence, shall render his office as trustee vacant.

Sec. 6. Vacancies in the board shall be filled by appointment by the mayor, by and with the approval of the city council, such appointees to fill out the unexpired term for which the appointment is made.

Sec. 7. Members of said board shall receive no compensation for their services.

Sec. 8. In any city where there is an art institute or art school or other organization whose purpose is the teaching of art or the promotion and development of public interest in

art, the board of trustees may make any contracts with such institutions for the special use of such art gallery or for the joint care of same as may in any lawful manner be mutually agreed upon between them; but no such city shall contribute any money for the support of any such private institution and no officer or employee of such private institution shall be a member of such board.

Sec. 9. Such board of art trustees shall have and exercise the following powers:

1. To meet and organize by the election of one of their number as president of the board, and by the election of a secretary and such other officers and committees as the board may deem necessary.

2. To have charge, control and supervision of the public art gallery, its works of art, appurtenances, fixtures and buildings or rooms containing the same, directing and controlling all the affairs of such art gallery.

3. To employ a director and such assistants and employees as may be necessary for the management of said art gallery and fix their compensation; but, prior to such employment, the compensation of such supervisor, assistants and employees, shall be fixed for the term of employment by a majority vote of such board of art trustees and such compensation shall not be increased during such period of employment.

4. To remove such director, assistants or employees by a vote of two-thirds of such boards for misdemeanor, incompetency or inattention to the duties of such employment.

5. To accept on behalf of the city, gifts or works of art; to select and make purchases of pictures, portraits, paintings, statuary and relics, and other objects of art, in the original and in replicas or copies, books, periodicals, papers and journals on the subject of art, furniture, fixtures, stationery, and supplies for such art gallery.

6. To receive, hold and dispose of all gifts, donations, devises and bequests that may be made to the city for the purpose of establishing, increasing, or improving such art gallery;

but when any such gift, donation, devise or bequest shall be conditioned upon any act of the city, the city council must first determine whether such condition can or shall be complied with.

7. To make and adopt, amend, modify, or repeal by-laws, rules, regulations, not inconsistent with law, for the care, use, government and management of such art gallery and the business of said board fixing, and enforcing penalties for the violation thereof.

8. To have exclusive control of the expenditures of all taxes levied for the purposes, as provided by law, and of the expenditure of all moneys available by gift, or otherwise for the erection of art buildings or for the promotion of such art galleries and of all other money belonging to the art gallery fund.

Said board shall keep a record of all of its proceedings.

Sec. 10. The city council may appropriate each year not to exceed five per cent (5%) of the general fund for the purpose of maintaining and enlarging such art gallery and for defraying the necessary expenses connected therewith, including the maintenance of the building in which such gallery is housed, water, light, heat and power and the salary of the director and his assistants.

Sec. 11. All moneys received and set apart for the maintenance of such art gallery shall be deposited in the treasury of such city to the credit of the art gallery fund and shall be kept by the treasurer separate and apart from all other moneys and paid out upon the orders of the board of art trustees signed by its president.

Sec. 12. Each year the board of art trustees shall make to the council a report for the year ending December 31st, containing a statement of the conditions of the art gallery, the number of pictures, portraits, paintings, statuary or relics contained in the gallery, and all additions thereto, the amounts of fines collected, the amount of donations, devises and bequests received during the year and the amount of money ex-

pended in the maintenance of such art gallery, together with such further information as may be deemed important.

Sec. 13. This act being deemed of immediate importance shall be in full force and effect from and after its passage and publication in the *Des Moines Register* at Des Moines, Iowa, and in the *Daily Times* at Davenport, Iowa, without expense to the state. (Iowa. Session Laws 1925, ch. 119, p. 109–111.)

MINNESOTA

Summary—Any county of specified population and area may appropriate up to $2,500 annually to a historical society in the county which is designated by the State Historical Society for work in the county. The method of payment is described in the law.

The county society is given authority to receive local war records.

Section 1. Any county in this state, having a population in excess of two hundred thousand (200,000) and less than two hundred and twenty-five thousand (225,000) according to the United State Census of 1920, and having an area of over five thousand (5000) square miles may, by action of its county commissioners, appropriate from the treasury of the county a sum not to exceed twenty-five hundred dollars ($2500.00) each year for the promotion of historical work within its borders.

Section 2. Said sum shall be so appropriated for the use of a historical society organized in said county and devoted to the collection, preservation and publication of historical material, the dissemination of historical information and in general carrying on historical work, said society to be designated by the Minnesota State Historical Society.

Section 3. The work of said historical society shall be done in the county making such appropriation and in reference to the history of said county and all facts relevant thereto.

Section 4. The money appropriated as aforesaid shall remain in the Treasury of the County and be paid out in payment of expense incurred by said County Historical Society for the purpose above indicated on verified bills approved by said local society according to its rules, in the same way that county bills are paid. Said appropriation shall be available for expense occurring in any year although not paid until the succeeding year. Any unused portion of any appropriation for any year shall revert to the funds of the county. Said appropriation shall be effective only for the year in which it is made.

Section 5. It shall be lawful for the county historical society, designated as aforesaid, by the Minnesota Historical Society to carry on the work of the Minnesota War Records Commission in its county and to receive, on and after the year 1923, possession of all local war records of any local war records commission of its county subject to the approval of the State War Records Commission and the Minnesota Historical Society. (Minnesota. Session laws 1923, ch. 202, p. 229–230.)

NEW JERSEY

Summary—Municipally-owned land or buildings may be leased to an incorporated historical society for a term not to exceed twenty years, at a nominal rental if desired, and upon such other terms as may be determined by the city.

A county may acquire land or buildings for the purpose of preserving data and objects of historical interest, and may lease the land or buildings to any incorporated historical society of the county upon such terms as it may determine. The rental may be nominal.

Section 1. Any land, building or buildings or interests therein owned by any municipality within its territoral limits, and in the judgment of the governing body of such municipality, or other body in control of such land, not at the time needed for municipal purposes, may be leased by such govern-

ing body or other body in control thereof to any incorporated historical society of such municipality for a term not to exceed twenty years and for such rental and upon such terms as such governing body or other body in control of such lands may by resolution determine; said rental may be, if such body so determines, only a nominal amount and may be less than the actual rental value of the land and improvements, and such governing body or other body in control as aforesaid is hereby authorized to make such lease accordingly. (New Jersey. Laws 1923, p. 127, ch. 60.)

Section 1. Any county may acquire, by gift or purchase, any land or real estate or any interest therein, together with any and all buildings thereon within the limits of any such county for historical purposes or for the purpose of preserving therein or thereon historical data and objects of historical interest.

Section 2. Any land, building or buildings thus acquired may be leased by the board of chosen freeholders of such county to any incorporated historical society of such county for such term of years as the board of chosen freeholders of such county may determine, and the respective boards of chosen freeholders of the several counties in this State are hereby authorized to lease such lands and buildings to any such incorporated historical society upon such terms and for such rental as said board may, by resolution, determine; said rental may be, if such board determines, only a nominal amount, and may not be the amount of the actual rental value of such building. (New Jersey. Laws 1920, ch. 269, p. 490.)

NEW YORK

Summary—The mayor or another public official shall appoint a local historian for each town or city or each borough of each city with more than one million inhabitants. The local authorities may provide the historian with space for the preservation of materials collected. The historians shall serve without pay unless other provision is made. Any

county, city, town or village may aid the work of the local historian either directly or in cooperation with patriotic organizations by appropriating money for marking of sites, collecting of historic objects and publishing.

It shall be the duty of each local historian to cooperate with the state historian in collecting and preserving material relating to local history.

Section 1198. A local historian shall be appointed, as provided in this section, for each city, town or village, except that in a city of over one million inhabitants a local historian shall be appointed for each borough therein instead of for the city at large. Such local historian shall be appointed as follows: For a city, by the mayor; for a borough, by the borough president; for a town, by the supervisors; for a village, by the president of the board of trustees. Such historian shall serve without compensation, unless the governing board of the city, town or village for or in which he or she was appointed, shall otherwise provide. In a city having a board of estimate and apportionment, a resolution or ordinance establishing compensation or salary for such historian shall not take effect without the concurrence of such board. The local authorities of the city, town or village for which such historian is appointed may provide the historian with sufficient space in a safe, vault, or other fireproof structure for the preservation of materials collected. Such local authorities and also the board of supervisors of each of the counties of the state are hereby authorized and empowered to appropriate, raise by tax and expend moneys for historical purposes within their several jurisdictions, including the placing of memorial tablets, in the collection of war mementoes, and, either alone or in cooperation with patriotic organizations, prepare and publish local histories and records relating to the world war and print and issue other historical publications in aid of the work of the local historian.

Sec. 1199. It shall be the duty of each local historian, appointed as provided in the last section, in cooperation with the State Historian, to collect and preserve material relating

to the history of the political subdivisions for which he or she is appointed, and to file such material in fireproof safes or vaults in the city, town or village offices. Such historian shall examine into the condition, classification and safety from fire of the public records of the public offices of such city, town or village, and shall call to the attention of the local authorities and the State historian and material of local historic value which should be acquired for preservation. He or she shall make an annual report, in the month of January to the local appointing officer or officers, and to the State Historian of the work which has been accomplished during the preceding year. He or she shall, upon retirement or removal from office, turn over to the local, city, town or village authorities, or to his successor in office, if one has been then appointed, all materials gathered during his or her incumbency and all correspondence relating thereto. The State Historian, at regular intervals, not less than once a year, shall indicate to the local historians the general lines along which local history material is to be collected. (New York. Laws 1919, ch. 181; 1921, chs. 381, 634.)

OHIO

Summary—Any county may support a properly organized local historical society by appropriation of $100 or less a year for purposes of historical research. It may house the society in any county building.

If a museum of science or art provides in a specified way[1] for the use of its building by the public, then the city, village or county in which it is located may allow the museum to use park land or other public property for building purposes. In such cases it may be agreed that public officials may appoint trustees of the museum and themselves become *ex-officio* trustees.

Any city may appropriate from general funds, or may raise

[1] The specifications, which are omitted from Section 10193 of the following text are so detailed that the act, in effect, is special legislation for a single institution. This circumstance led to the act of 1925.

by taxation, not to exceed ¼ mill on each dollar of taxable property each year, and may pay it to a privately organized museum of art, science or history maintained for the people. The city and the museum may enter into contract as to terms.

Section 2457-1. The county commissioners of any county having therein an historical or pioneer association, incorporated not for profit, with a board of trustees or directors legally constituted, may allow and pay out of the general fund in the county treasury, not otherwise appropriated, the cost expended by such incorporation in collecting, compiling and publishing in pamphlet or book form, papers, memoranda and data of historical value, together with the regular proceedings of such incorporation, not exceeding one hundred dollars in any one year.

Section 2457-2. No allowance for such cost shall be made or paid unless an itemized account thereof duly approved by the board of trustees or directors of such incorporation shall be duly presented to such county commissioners.

Section 2457-3. Such publications shall be placed in the custody of such corporations and be by the same distributed at such price and in such manner as the incorporation may direct. (Ohio. General Code 1921, pp. 718–19.)

Section 3069. The commissioners of any county may permit the occupancy by any society or association of soldiers, sailors, marines and pioneers, or any historical association, of any county building, or part of parts thereof not necessary for other county purposes. (Ohio. General Code 1921, p. 816.)

Section 10193. When a corporation organized for the purpose of constructing and conducting a museum for the exhibition and preservation of works of nature and art, and for instruction in connection therewith . . . provides in its articles of incorporation that its buildings or a designated part thereof, shall be devoted to the use of the public for all purposes set forth therein, free from cost, charge or expense except such as are necessary to provide the means to keep

the buildings, or part thereof and its grounds in proper condition and repair, and to pay the cost of insurance, care, management and attendance, so that the public may have the benefit thereof for the uses set forth in its articles at as little expense as possible, that no stockholder, subscriber, trustee, director, or member shall receive any compensation, gain or profit from the corporation for such public use of its buildings or part thereof, the authorities of any city, village or county in which the corporation is located, may appropriate to such use and grant the right to such corporation to erect and perpetually maintain its buildings on any of the parks, lands, lots or grounds which, or the use of which belong to or are subject to the control of such city, village, county, or the authorities thereof, and to control them on terms and conditions which may be agreed upon between the public authorities and the corporation. In every such case the public authorities and corporation may agree that additional trustees of the corporation may be appointed by such public authorities, and upon the number thereof and the method of their appointment. They also may agree that any officer or officers of such city, village or county to be designated by them *ex-officio* may act as trustees. (Ohio. General Code 1921, p. 2239.)

Section 1. That section 4020 of the General Code be amended to read as follows:

Sec. 4020. The council of each city may appropriate from its general funds, or may levy and collect a tax, not to exceed one-quarter of one mill on each dollar of the taxable property of the municipality each year, and pay it to a private corporation or association, not for profit, maintaining and furnishing a free museum of art, science, or history, for the benefit of the inhabitants of the municipality, as and for compensation for the use and maintenance thereof. The city council may enter into a contract or agreement with such corporation or association setting forth the terms and conditions upon which the appropriations are to be made and paid. (Ohio Laws 1925, p. 87.)

PENNSYLVANIA

Summary—Any city of the first, second or third class may make an annual appropriation to its principal historical society, provided the society has fulfilled certain specified requirements.

Any county may make an annual appropriation of $1,000 or less to a local historical society to assist in paying its running expenses. Two or more counties may appropriate the same amount jointly to a society composed of residents of the several counties. In any case the society must have fulfilled certain requirements stated in the law.

Upon petition of fifty citizens for erection and maintenance of a war memorial, approved by two successive grand juries, the county shall bring the question to vote and if the project is favored, the county shall acquire property at the county seat and erect a memorial hall containing fireproof rooms for the county historical society. These rooms shall be properly equipped.

Section 2972. It shall be lawful for the councils or council of cities of the first, second, and third classes within this Commonwealth to make an annual appropriation from the funds of such city or cities for the support and maintenance of the principal historical society located therein: Provided, That, as a prerequisite to the receiving of an appropriation, any such society shall be incorporated under the laws of the State of Pennsylvania, shall own its own building and keep it open to the public, shall have a membership of at least two hundred persons who pay annual dues of at least two dollars, shall hold, annually, at least six regular meetings that shall be open to the public, and shall at all times maintain facilities for the free storage, deposit, and inspection of official documents and records of such city or cities, and other proper public or historical archives and records. (Pennsylvania. Statutes 1920, p. 277)

Section 7522. From and after the passage of this act, the commissioners' board of the respective counties of this

Commonwealth may, in its discretion, pay out of the county funds not otherwise appropriated, and upon proper vouchers being given, a sum not exceeding one thousand dollars, annually, to the historical society of said county, to assist in paying the running expenses thereof. Where such a society is comprised of residents of more than one county, the commissioners of said respective counties may jointly pay said sum in such proportion as they shall agree.

Section 7523. In order to entitle the said historical society to the said appropriation, the following conditions shall have been first complied with: The money shall be paid to the oldest society in each county, if there be more than one; it shall have been organized at least three years; incorporated by the proper authority, and have an active membership of one hundred persons, each of whom shall have paid into the treasury of said society a membership fee of at least two dollars for the support of the same: And provided further, That no appropriation under this act shall be renewed until vouchers shall be first filed with the board of county commissioners, showing that the appropriation for the prior year shall have been expended for the purpose designated by this act.

Section 7524. And be it further enacted, that to entitle said society to receive said appropriation it shall hold at least two public meetings yearly, whereat papers shall be read or discussions held on historic subjects; that it shall have established a museum, wherein shall be deposited curios and other objects of interest relating to the history of county or state, and shall have adopted a constitution and code of by-laws, and elected proper officers to conduct its business. (Pennsylvania Statutes 1920, p. 707.)

Section 23. In any county of the commonwealth, where the petition of at least fifty citizens thereof to the county commissioners of any county for the erection or completion and maintenance of a memorial or monument in honor of the soldiers, sailors, and marines for such county, who served in the army and navy of the United States in the war of the

rebellion, the Spanish-American war, the Philippine Insurrection, the war with Germany and Austria, and all other wars in which the United States has been or may hereafter be engaged, has been or may be laid before two successive grand juries and approved by them, it shall be the duty of the county commissioners to submit the question of the erection of a memorial hall to the electors of the county at the next general or municipal election; and, if a majority of the persons voting at such election shall vote in favor of the same, it shall be the duty of the county commissioners to erect, at the county seat, a memorial hall as such memorial or monument, and for such purpose to acquire by purchase, donation, or by condemnation under the right of eminent domain, the necessary site, and to erect and maintain thereon a suitable and proper memorial hall or buildings in memory of the soldiers, sailors and marines of such wars. All proceedings for the condemnation of any property under the provisions of this act shall be in the same manner as now provided by law for the condemnation of property for other county purposes.

Section 27. . . . Such memorial halls shall each contain . . . rooms for the county historical society.

Section 28. The room for the county historical society shall be made as nearly fireproof as possible, and be provided with the proper files and furnishing for preservation and storing of all historical data of the said county with reference to any and all subjects. (Pennsylvania. Purdon's Digest, v. 8, p. 9129–30)

APPENDIX E

DEALERS IN REPRODUCTIONS OF WORKS OF ART

THE following compilation is based upon a list prepared by Holmes Smith, Professor of Drawing and the History of Art, Washington University, and published in 1924 as part of a leaflet entitled: *The appreciation of the fine arts—an outline of a course for college students approved by the committee on education of The American Institute of Architects.* Acknowledgment is made to Professor Smith for permission to use the material, and to Alice L. Felton, of The Metropolitan Museum of Art for additional information which has been incorporated.

DEALERS IN PHOTOGRAPHS AND PRINTS

Alinari Bros., 8 Via Nazionale, Florence, Italy.
Anderson, D., Via Salaria, 7a, Rome, Italy.
Archives Photographiques d'Art et d'Histoire, Palais Royal, Paris, France.
Art Institute of Chicago, Chicago, Ill.
Braun, Maison Ad. & Cie., 47 West 47th St., New York, N. Y. and Dornach, Mt. Rhin, France.
British Museum, London, England.
Brogi, Giacomo, 1, Via Tornabuoni, Florence, Italy.
Brown Co., 38 Lovett St., Beverly, Mass.
Brown-Robertson Co., 8–10 East 49th St., New York, N. Y.
Bruckmann, Friedrich, Munich, Germany.
Bullez, J. E., 21 Rue Bonaparte, Paris, France.
Bureau of University Travel, 11 Boyd Street, Newton, Mass. (The University Prints.)
Chapman, S. H., 1128 Spruce St., Philadelphia, Pa.
County Studio, W. A. Call, Monmouth, England.
Curtis & Cameron, 12 Harcourt St., Boston, Mass.
Detroit Publishing Company, Detroit, Mich.
Elson Company, 2A Park St., Boston, Mass.
Essex Institute, Salem, Mass.

Frith, F., & Co., Reigate, Surrey, England.
Gaddis & Seif, Winter Palace Building, Luxor, Egypt.
Giraudon, A., 9 Rue des Beaux Arts, Paris, France.
Grantz, Else, Templehofer Ufer 32, Berlin, Germany.
Hanfstaengl, E. F., 153 West 57th St., New York, N. Y.
Jacobsthal, Prof. Paul, University of Marburg, Marburg, Germany.
Johnson and Hoffmann, Chowringhee, Calcutta, India.
Kennedy, Prof. Clarence, Smith College, Northampton, Mass.
Kodak, Cairo, Egypt.
Lesch, Rudolf, 225 Fifth Ave., New York, N. Y.
Librairie de France, 110 Boulevard Saint-Germain, Paris, France.
Lombardi, Cav. Paolo, Siena, Italy.
Mansell, W. F., Elfin Works, Teddington, S. W., London, England.
Medici Society of America, 755 Boylston St., Boston, Mass.
Metropolitan Museum of Art. New York, N. Y.
Moscioni, Romualdo, Via Condetti, 76, Rome, Italy.
Munder, Norman, T. A., & Co., 109 Market Pl., Baltimore, Md.
Press of the American Institute of Architects, 250 West 57th St., New York, N. Y.
Portugal Casuso, Nicholas, Carrera de San Jeronimo, 53, Madrid, Spain.
Smith, Sam, The Minster Shop, 36 Steep Hill, Lincoln, England.
Stoedtner, Dr. Franz, Universitätstr. 3b, Berlin, V. W. F., Germany.
Victoria and Albert Museum, South Kensington, London, England.

MAKERS OF OTHER REPRODUCTIONS

Boston Sculpture Co., Melrose, Mass. *Plaster casts.*
British Museum, London, England. *Electrotypes of Greek coins.*

Brucciani, D. & Co., 40 Russell St., W. C., London, England. *Plaster casts.*

Caproni, P. P., & Brother, 1914 Washington St., Boston, Mass. *Plaster casts.*

Chiurazzi & Son, Naples, Italy. *Bronzes.*

Christofle et Cie., 56 Rue de Bondy, Paris, France. *Metalwork.*

Elkington & Co., 15 Middleton St., London, England. *Metalwork.*

Florentine Art Plaster Co., 2208–12 Chestnut St., Philadelphia, Pa. *Plaster casts.*

Gerber, August, Cologne, Germany. *Plaster Casts.*

Gillieron, E., & Fils, Rue Skoufa 43, Athens, Greece. *Electrotype reproductions, water-color copies and plaster casts (colored).*

Hennecke, Co., Milwaukee, Wisc. *Plaster casts.*

Lisio, G., Via dei Fossi 17, Florence, Italy. *Antique Italian brocade samples.*

Manufattura di signa Societa Industriale, Via Babuino, Rome, Italy. 17 Mount St., W., London, England. *Plaster casts.*

Martinelli, Napoleone F., Athens, Greece. *Plaster casts.*

Metropolitan Museum of Art, New York, N. Y. *Casts of Arretine and Egyptian objects.*

Miller, F. W., 121 Angell St., Providence, R. I. *Casts of Byzantine and mediæval ivories.*

Ostercamp-Mead Corp'n, 511 Fifth Ave., New York, N. Y. *Small antique bronzes.*

Roman Bronze Works, 275 Greene St., Brooklyn, N. Y. *Bronzes.*

Sabatino de Angelis & Son, Naples, Italy. *Bronzes.*

Würtembergische Metallwarenfabrik, Geislingen Steige, Würtemberg, Germany. (Also represented by E. Gillieron & Fils, Athens). *Electrotype reproductions of Mycenæan, Cretan, Arretine, Roman and Merovingian antiquities.*

Only a few of the more important dealers are included here. A complete list would show a very great number of sources,

and to be usable it would have to be well indexed and annotated. There is no such list in print, but one is in preparation by Miss Felton to whom acknowledgment is made above.

An old but useful *List of photograph dealers* was compiled by Etheldred Abbot and published in 1907 by The Massachusetts Library Club. Copies may be obtained for 15 cents from the Public Library, Brookline, Massachusetts. Part 19 of *Modern American library economy as illustrated by the Newark, N. J., Free Public Library* (Woodstock, Vermont, The Elm Tree Press, 1916)—a compilation by Dana and Gardner—includes a list of dealers in pictures and a bibliography of catalogs and source-lists of pictures and objects. A short list of selected prints and photographs has been published by The American Federation of Arts, Washington, D. C., under the title: *A catalog of prints reproducing paintings by old and modern masters*

APPENDIX F

DIRECTORIES OF MUSEUMS

A LIST of about one thousand museums with addresses and names of officers in charge, was published recently by The American Association of Museums:

Directory of museums: museums of the United States, museums of United States possessions. Museum Work, March–April 1926, 8: 129–155.

The more active museums in this directory may be identified by reference to a list of the Institution Members of The American Association of Museums of which a revised edition is published from time to time and may be had upon application. For fuller information about the character and work of individual museums the only general source is a directory which is now somewhat obsolete:

Rea, Paul Marshall. A directory of American museums of art, history and science. Bulletin, Buffalo Society of Natural Sciences. 1910, 10: 1–360.

A very complete annotated directory of historical societies, published recently, indicates societies which maintain museums:

Handbook of American historical societies. Madison, Wisc., Conference of Historical Societies, Committee on Handbook, 1926, 81 pp.

APPENDIX G

GENERAL REFERENCES

A LARGE part of the fragmentary literature on museum practice in this country is contained in two serial publications:

PROCEEDINGS OF THE AMERICAN ASSOCIATION OF MUSEUMS. Published annually. 11 volumes: 1907 to 1917. Include papers, reports and dicussion at annual meetings.

MUSEUM WORK. Published monthly or bimonthly by The American Association of Museums. 8 volumes: 1918–19 to 1925–26. Contains papers, reports and book reviews.

An index to these two completed serials has been published as No. 2, 1927, of a serial which replaced Museum Work, namely:

PUBLICATIONS OF THE AMERICAN ASSOCIATION OF MUSEUMS. *New series.* The numbers of this series, of which the first appeared in 1926, are monographic.

The news of the museum field is presented in a newspaper:

THE MUSEUM NEWS. Published semi-monthly by The American Association of Museums. 1924 to date.

These publications may be obtained from the Association which has its headquarters at the Smithsonian Institution, Washington, D. C. They should be available for references in the library of every museum.

Another serial publication in English which is important is:

THE MUSEUMS JOURNAL. The organ of the Museums Association of Great Britain.

The following are good general works:

Dana, John Cotton. The new museum. Woodstock, Vermont, The Elm Tree Press, 1917, 52 pp.

————————. The gloom of the museum (No. 2 of The new museum series), Woodstock, Vermont, The Elm Tree Press, 1917, 45 pp.

————————. A plan for a new museum. The kind of a museum it will profit a city to maintain. (No. 4 of The new museum series), Woodstock, Vermont, The Elm Tree Press, 1920, 57 pp.

Clifford, William. Bibliography of museums and museology. New York, The Metropolitan Museum of Art, 1923, 98 pp.

Connolly, Louise. The educational value of museums. Newark, N. J. Newark Museum Association, 1914, 73 pp.

Gilman, Benjamin Ives. Museum ideals of purpose and method. Cambridge, Riverside Press, 1918, 434 pp. (Houghton Mifflin Co.)

Goode, George Brown. The principles of museum administration. U. S. National Museum, Report, 1897, Pt. 2: 195–240.

Jackson, Margaret Talbot. The museum. A manual for the housing and care of art collections. New York, Longmans, Green and Co., 1917, 280 pp.

INDEX

INDEX

A

Accession, authority for, 51, 121
  committee, 51, 335, 340
  number, 184
  policy, 121, 129
  records, 174, 176
Accessories, group, 235
Accounts, 88
  endowment, 101
  expenditure, 90
  income, 88
  numbering, 95
  plant, 99
Acquisition, *See* Accession
Acquisitions, exhibiting new, 132
Act of incorporation, 331
Activities, museum, 241
  for children, 246
Addressing machine, 110
Administration, *See* Aims, Business, By-laws, Charter, Contract, Constitution, Director, Ethics, Finance, Organization, Staff, Trustees, Women's Auxiliary
Admission, 243
Adult education, 260
Advertising, *See* Publicity
Aims, educational work, 11, 241, 246, 260
  exhibits, 132, 209
  museum, 10, 330, 333
  research, 11, 291
Air conditioning, 319
Alcoves, temporary, 318
Alterations, building, 116
Amateurs, collectors, 171, 292
  curators, 31
Amendments, 338, 342
American Association of Museums, 60, 106, 114, 384, 385
American Library Association, 267
Annual meeting, 335
Annual report, 104, 269
Appointment, *See* Director, Curators, Assistants
Appropriations, public, 21, 57, 344
Archæological survey, 292
Archæology, as subject matter, 7, 147
Architect, 297
Architecture, 310
Archives, 264
Art, as subject matter, 6, 161
Articles of incorporation, 329
Artificial light, 318
Assessed valuation, basis of support, 59
Assistants, 32
  appointment, 335
Authority, administrative, *See* Duties
  for purchases, 121, *Also see* Budget
Attendance, at hours, 253
  at museum, 243
Auxiliary, women's, 38

B

Backgrounds, group, 235
Backs, case, 205
Balance sheet, 105
Balsam cement, 219
Bases, case, 199, 205
  object, 220
Benefactors, *See* Members
Bequests, 61, 62
  form of, 81
Bibliographies, *See* References
Biology, as subject matter, 168
Board of trustees, *See* Trustees
Bonds, fidelity, 341
  municipal, 58, 75
Book classification, 265
Book selection, 265
Book purchase, 69
Bookkeeping, 88
Borrowing funds, 66, 79
  by city, 58, 75
Borrowing objects, *See* Lending collection, Loan, School-service
Botany, as subject matter, 168
Boys as assistants, 32
Branch exhibits, 42, 135
Branch museums, 138
Budget, 55, 102
Building, 115, 297, 301, 311; *Also see* Plant
Building committee, 51
Bulletin board, 278
Bulletins, 270

Burlap, case lining, 217
wall covering, 317
Business-office methods, 109
Business standards, 47
Buying objects, 121
authority for, 51, 102
By-laws, 26, 332

C

Campaigns, 61, 281
Canada balsam cement, 219
Canned lectures, 143, 262
Capital, 58
Capital outlay, 68, 75
Cards, membership, 36
Care of collections, 195
Case, carrying, 146
construction, 203
exhibition, 198, 215
group, 236
lining, 217
manufacturers, 198
Also see Screens
Casts, *See* Reproductions
Catalog, exhibits, *See* Gallery leaflet
lending collection, 145
objects, 174, 177
Catalog number, 184
Cement, for installing, 219
Center cases, 198, 200, 216
Certificate of incorporation, 329
Certificates, for study, 250
Charter, city, 77
museum, 329
Checks, bank, 93
Children, activities for, 246
as members, 36
as docents, 254
Circulating collection, 140, 156, 164
City, appropriations, 57
relation to, 22, *Also see* Contract
support, 21, 157, 344, 350
City museums, 21, 78
Classes, adults, 261
children, 249, 255
membership, 34
Classification, art material, 163
history material, 151
lending collection, 144
library, 265
science material, 167
Clubs, 249
Collecting, 171
amateur, 292
Collections, art, 162
history, 150
housing, 195
science, 167
Also see Study collections
Color, in exhibits, 213
Committees, campaign, 284
trustees, 25, 51, 335, 340
Community chest, 62
Community trust, 81, 86
Compressed cork, 220
Conditions, gift, 123
loan, 124
Congoleum, 236
Constitution, 26, 332
Construction, building, 310
case, 203
Consulting director, 28, 73
Containers for loans, 141, 146
Contract, city, 76, 343
gift, 125
loan, 126
Contributions, 61, 338
Cooperation, historical societies, 41
industry, 242
libraries, 42
museums, 42, 73, 134, 203, 324
newspapers, 277
organizations, 40, 42
schools, 255, 286
Cork, compressed, 220
Corporate members, 22
Corporation, 22, 61
charter, 329
Correspondence, 109
Cost, building, 310
case, 202
operating, *See* Expenditure
Councils, educational, 42
County, appropriations, 57, 350
Courses, 249, 261
Credit, for students, 250
Culture-history, as subject matter, 148
Culture material, 6, 7
Curators, 28, 30
appointment, 335
duties, 53
Current expense, 68, 70
funds available for, 58

D

Days, open, 244
Dealers in reproductions, 380
Decimal classification, 265

Decks, case, 204
Decoration, building, 317
Department records, 178, 180
Departments, assignment of objects to, 128
  of collections, 128
  of exhibits, 134
  staff, 31
Deposit, conditions, 124
  contract, 126
Depreciation, 69, 99
Dermestes, 196
Design, in exhibits, 211
Director, 27
  appointment, 335
  consulting, 73
  duties, 52, 54, 340
  honorary, 17
  salary, 72
Directories, 384
Disbursements register, 89
Disbursing, 55
Discussion, class, 247, 261
Disposal record, 180, 182
Dividends, 64
Docent, 242, 254
Donor record, 179, 181
Donors, *See* Members
Dues, 34, 56, 338
Duties, committees, 51, 340
  director, 52, 54, 340
  officers, 50, 339
  staff, 53
  trustees, 26, 49, 52

E

Economic science, as subject matter, 169
Education, adult, 260
Educational aims, 11, 241, 246, 260
Educational program, 241
Equipment, 77, 117, 317, *Also see*, Cases, Housing, Study Collections
  accounting for, 99
Election, members, 36, 336
  officers, 25, 334, 338
  trustees, 22, 24, 49, 334, 337
Endowment, 79
  accounting for, 101
  cash book, 93
  income on, 64
Establishing museums, 15
Ethics, 48
Ethnology, as subject matter, 7, 147
Examinations, 250
Excursions, 249
Executive Committee, 51, 335, 340
Exhibiting everything, 127
Exhibition cases, 198
Exhibition screens, 207
Exhibits, art, 163
  character and purpose, 131, 262
  history, 156
  science, 167
  Also See Groups, Installation, Labels
Exhibits in libraries, 42
Ex-officio trustees, 24, 60, 334
Expansion, building, 307, 314
Expenditure, 68
Extra-mural exhibits, 135
Evening opening, 244

F

False case backs, 200, 217
Fastenings, case, 204
Fatigue, museum, 216
Fees, 65
Field of museums, 6, 128
Field work, 171
  accounting for, 69
  amateur, 292
Files, correspondence, 109
Finance, administration of, 54, 341
  Also see, Accounts, Endowment, Expenditure, Income, Plant, Public support
Financial statistics, 106
Finding list, 179
Fire protection, 320
Floor cases, 198
Floor screens, 208, 216
Floors, 305, 318
Follow-up system, 109
Foreground, group, 234
Format, labels, 229
  publications, 271
Forms, bequest, 81
  accounting, 98
  gift, 81, 125
  loan, 126
  statistical, 107
Fossils, mounting, 220
Founding, museum, 15
Frames, case, 203
Fumigation, 196
Future of museums, 323

G

Gallery leaflet, 224
Games, museum, 247
General labels, 228
General museums, 4, 129
Geology, as subject matter, 168
Getting started, 112
Gift, conditions, 123
  contract, 125
Gifts, money, 61
  objects, 121, 339
  other property, 35, 339
Glass, for cases, 205
  for shelves, 218
Grants, *See* City, relation to; Contributions
Group discussion, 247, 257
Groupings, 238
Groups, 232
Guards, 33
Guides, *See* Docent, Gallery leaflet

H

Habitat groups, 232
Hanger, Shrosbree, 219
Heating, 319
Historical society, relation to, 17, 41, 264
Historical survey, 292
History, as subject matter, 6, 147, 150
History of museums, 21
Hobby clubs, 249
Homosote, 196
Honoraria, 73
Honorary curators, 31, 335
  director, 17
  members, 36, 334
Housing collections, 195
Hours, opening, 243
  instruction, 246

I

Illustrative material, *See* Lending collection
Income, 56
  securing initial, 17, 56, 113
Income tax exemption, 61
Incorporation, 22, 329
Index (record), 179, 180
Industrial art, as subject matter, 161
  service to, 242
Industry, as subject matter, 8 149
Information service, 243
Illumination, *See* Lighting
Insect pests, 196
Installation, objects, 209
  labels, 230
Installation without shelves, 218
Instruction, adults, 260
  children, 246
  school classes, 257
Instructor, 242, 258
Insurance of property, 73
Insurance, endowment policies, 83
Interest, 64
Interior decoration, 317
Interpretation, *See* Instruction
Inventory of plant, 97, 106
Investments, accounting for, 97, 101
  income on, 64
  selection of, 83
Journal, 97
Junior docents, 254
Junior members, 36

L

Labeling, collections, 185; exhibits, 223
Land, 299
Lantern, lending, 262
Lantern slides, 142
Laws, affecting support, 59, 281, 350
Leaflet publications, 271
Leaflets, gallery, 224
Lease, *See* Contract
Lecture fees, 65
Lectures, 262
  canned, 143, 262
Ledger, 94, 96
Legislation, *See* Laws
Lending collection, 140, 256
Library, classification, 265
  exhibits for, 42, 135
  in museum, 264
  reading courses, 261
  relation to, 17, 300
Library of Congress classification, 265
Life membership, 34, 339
Lighting, building, 308, 316, 318
  cases, 207
  groups, 237
Lining, case, 217

List of investments, 97
Living exhibits, 136, 169
Loan, conditions, 124
  contract, 126
  Also see Lending collection
Loan exhibits, art, 164
Loan record, 180, 181
Local scope, art, 164
  history, 150
  science, 167
Location file, 179
Location, museum, 299

M

MacLean case, 201
Maintenance, 73
Manufacturers of cases, 198
McCabe molding, 318
Meetings, 25, 335
Members, campaign for, 287
  cards for, 36
  classes, 34, 334
  córporate, 22
  dues, 34, 82
  election, 336
Membership ledger, 96
Memorandum paper, 110
Memorials, 19, 81, 123
Metal, for cases, 201, 202
Mimeograph, 111
Mineralogy, as subject matter, 168
Miniature groups, 232
Misspent effort, 243
Mounting, *See* Preparation
Motion picture film, 144
Municipal museums, 41, 78
Municipal support, 157
Museum fatigue, 216
Museum games, 247
Museum hours, 247
Museums, kinds, 6
  directories, 384

N

Name, 19
Natural history, as subject matter, 7, 166
Natural light, 308, 316
Nature trails, 137, 250
Newspaper files, 264
Newspaper publicity, 276
Nomination, *See* Election
Notes, for endowment, 82
Number, accession, 174
  catalog, 175
Numbering, accounts, 95
  objects, 184

O

Object index, 179
Objectives, *See* Aims
Office methods, 109
Officers, 25
  duties, 50, 339
  election, 25, 334, 337
Operating expenditure, 68, 70
  accounting for, 98
Original art works, 162, 163
Organization, 21, *Also see*, By-laws, Charter, Constitution, Director, Staff, Trustees
Organizing, 15
Outdoor exhibits, 136
Outlook, 323
Ownership of property, 75, 77, 78, *Also see* Municipal museums

P

Paleontology, as subject matter, 168
Park sites, 300
Partitions, temporary, 318
Patrons, *See* Members
Pay-days, 244
Period room, 237
Permanent exhibits, 133
  art, 163
  history, 156
  science, 167
Personnel relations, 47
Pests, insect, 196
Petty cash, 96
Photographs, for lending collection, 142, 145, *Also see* Reproductions
Picture hanging, 222, 318
Picture molding, 318
Pictures, for lending, 142, 145
Placement, cases, 215
  objects, 216
Plans, building, 301, 311
Plant, 69, 75
  accounting for, 99
  inventory, 97
Plumbing, 320
Policing, 33
Politics, 60
Powers, *See* Duties

Preparation, 187
President, 25
  duties, 50, 52, 54, 340
Print collection, 163, *Also see* Reproductions
Printing, 271
Privileges, membership, 36
Program of work, 112
Projects, special, 62
Promoting museums, 15
Prospectus, 112
Public library, *See* Library
Public museum, 21
Public support, 21, 57, 344, 350
Publications, 269, 293
Publicity, 261, 276, *Also see* Campaigns
Purchasing objects, 121
  authority for, 51, 102
Purposes, *See* Aims

Q

Quarters, temporary, 115
  permanent, *See* Building
Quorum, 336

R

Racks, storage, 196
Radiators, 319
Real estate investments, 84
Receipts register, 88
Recent gifts, exhibiting, 132
Records, financial, 88
  collections, 173
  lending material, 145
Recreational aim, 11
References, general, 385
  list of xiii
Reference library, 264
Registrar, 30, 173
Registration, 173
Rejections, 122, *Also see* Disposal
Release, newspaper, 278
Relics, 149
Reorganization, 17
Replacement costs, 69
Reports, annual, 104, 269
  monthly, 104
  of surveys, 293
Reprinting, 27
  from newspaper, 273
Reproductions of art works, 161
  dealers in, 380
Research, 291
Restoration, 187
Restricted gifts, 62
Revenue, *See* Income
Rooms, in building, 303

S

Salaries, 72
Sales, as source of income, 65
  from temporary exhibits, 165
  from permanent collections, 124
Schedules, in report, 105
School-service, 140, 255
Science, as subject matter, 7, 166
Scope of collections, 129
  art, 162
  history, 147
  science, 166
Scouts, 41, 249
Screens, exhibition, 207
Secretary, 25
  duties, 50, 339
Securities, 84
Selling, *See* Sales
Service, public, 113, 241
Services, personal 72
Sets, lending, 141, 143
Shelf supports, 206
Shelves, case, 218
  installation without, 218
Shop costs, 68
Shrosbree hanger, 219, 230
Site, 299
Slides, lantern, 142
Small groups, 232
Small museums, defined, 3
Social affairs, 39, 243
Source list, 179
Sources of collections, 121
Special projects, 62
Specimen index, 179
Staff, 30
  appointment, 335
  duties, 53
Standard case sizes, 200
Statistics, financial, 106
Statutes, *See* Laws
Storage, 127, 195
Story hour, 247
Study collections, 127
  art, 162
  history, 150
  housing, 195
  science, 167

Subject matter, *See* Field, various subject headings: Archæology, Art, History, etc.
Subsidy, *See* Income
Sulphur mount, 220
Sunday opening, 244
Surveys, 292
Swinging screens, 207

T

Table cases, 198, 200, 216
Tags, specimen, 184
  label, 224
Talks, 247
Tax appropriations, 58
Taxes, exemption from, 61, 74
Taxidermy, *See* Preparation
Teachers, aid to, *See* School-service
Teaching, *See* Instruction
Technique, *See* Preparation
Temporary exhibits, 133
  art, 164
  history, 159
  science, 169
Temporary number, *See* Accession number
Temporary quarters, 115
Terms, office, 25, 334
  trusteeship, 24, 334
Trails, nature, 137
Trailside museums, 137
Transportation of classes, 259
Traveling exhibits, 134, 164
Trays, storage, 195
Treasurer, 25
  duties, 54, 340
Treasurer's report, 104
Trust company, 86
Trustees, 24, 334
  duties, 49, 339
  election, 22, 24, 49, 334, 337
  removal, 338
Type, 272
Type specimens, labeling, 186

U

Umbrella plates, 185

V

Vacancy in office, 334
Vehisote, 204
Ventilation, cases, 206
  groups, 236
  rooms, 319
Vertical installation, 218
Vice-president, 25
  duties, 50, 339
Visitors, 244
Volunteers, 30
  collectors, 292
  curators, 31
Votes, campaigns for, 283
Vouchers, 94
Voucher checks, 94

W

Wall cases, 198, 200, 215
Wall installation, 221
Wall screens, 207
Walls, treatment of, 317
Wasted effort, 243
Wax-and-balsam, 219, 230
Weeks, museum, 287
Windows, 309
Women as directors, 29
Women's auxiliary, 38
Wood, cases, 201, 203
  shelves, 218

Z

Zoology, as subject matter, 168